THE BUILDER

A Journal for the Architect & Constructor

DECEMBER 20, 1929. No. 4533

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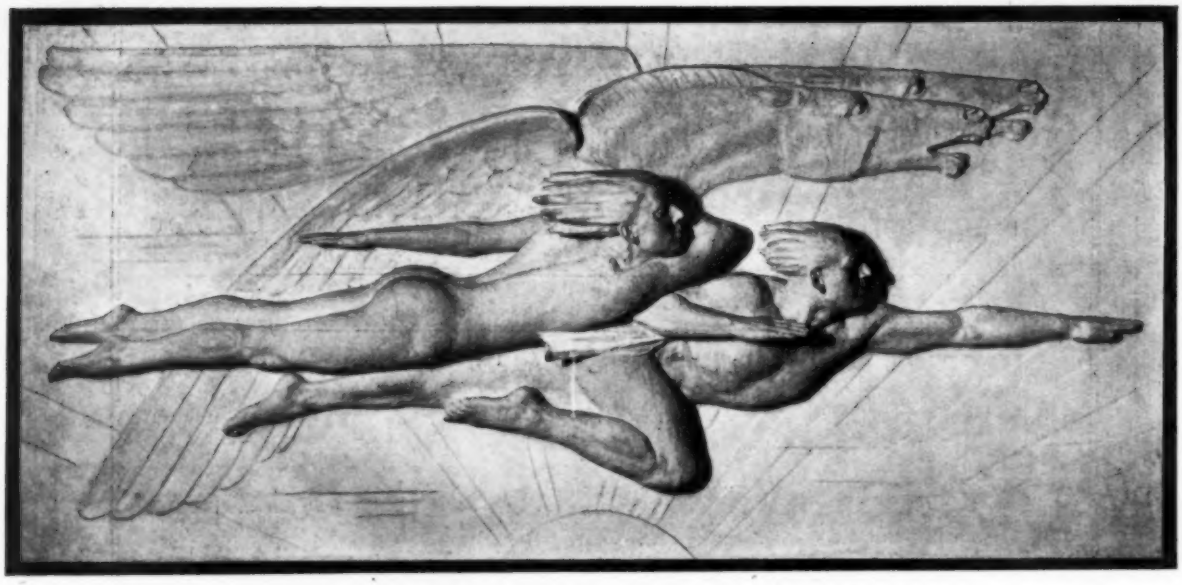
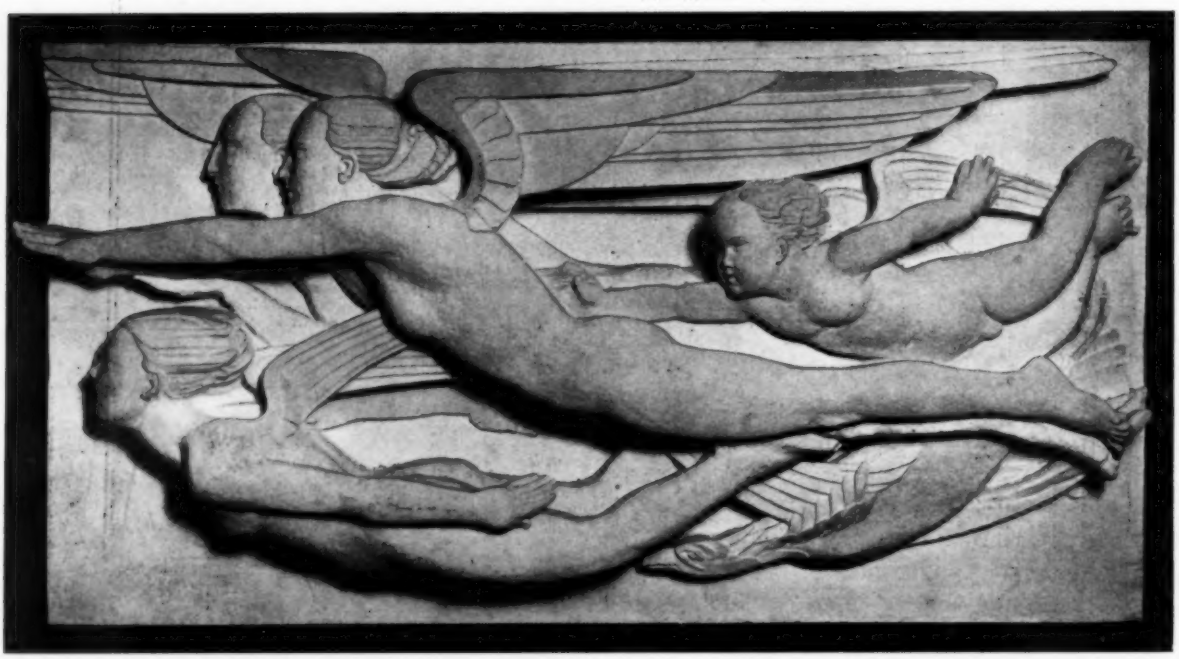
87TH YEAR



Design by MR ERNEST ALBERT JONES.

R.A. GOLD MEDAL AND EDWARD STOTT TRAVELLING STUDENTSHIP.
COMPOSITION IN SCULPTURE—"SPEED."



WINNING DESIGN.
By MISS MARJORIE MEGGITT.

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VOL. CXXXVII. No. 4533. DECEMBER 20, 1929.

DECENTRALISATION: PRESENT AND FUTURE

THE word "decentralisation" has been much heard of late and is a formula rich in important ideas. It comes into use as the antithesis of "centralisation," which represents phenomena which are objectively familiar and theoretically understood by many. Centralisation is, indeed, a process which has always been at work and is the norm of development in the early stages of town building at all times. At the cross-roads, on the banks of a river or the brow of a hill, a cessation of movement takes place and a human settlement is established. Once the central nucleus is thus marked, a ring or strip of neighbouring dwellings is added and another until a township is formed where all elements are as close as convenient. Centralisation therefore is normal, inevitable and right. One only has to put the contrary proposition that buildings, dwellings and civic features should be distant and isolated to realise how impracticable it would have been to follow it in the early stages of town development. Contiguity is necessary for domestic, economic, social and political reasons, and in the warring days was especially important for security. If we trace the process of centralisation in any country and during any epoch we shall discern these forces quietly and remorselessly at work. They are recorded, for those who care, in maps of villages, towns and cities of the world, some few of which have been formally planned while most have been planned, as it were, by instinct.

We often hear the expression "unplanned town," and while appreciating its meaning, it must be recognised that even badly planned towns are the result of day-to-day decisions, often unwise, which constitute a plan of sorts; but the best plan is the pre-plan: made before the streets are cut or the houses built. And that, no doubt, is the essence of modern town planning, begun only twenty years ago. But whether a town has been planned well or ill aforetime, the day arrives for the sensitive citizen or technician when it is felt that centralisation has reached its danger point. There can be too much of a good thing—we often hear—and too much of a natural, inevitable thing. At every point where centralisation has proceeded to its furthest limit a new necessity arises: to call a halt! It is a commonplace that our British towns are found to be congested and many of our dwellings overcrowded. The raising of sanitary standards in the 'seventies put the mark of condemnation on much that was once permitted, and the process continues. Our great cities are far too large, and contain within them the material and the organisation of many townships, nearly all of which lack the surrounding element of open land.

The present epoch has witnessed the beginning of a process of decentralisation, not as a conscious reaction against the evils of urban congestion, but, as a consequence, almost entirely, of the new inventions of transport. Railways led to centralisation by pouring out from their termini and main stations large quantities of goods and passengers; but now a sister engine—motor transport, with the roads it calls for and creates—has initiated the movement of decentralisation. Factories lie along the railway lines and new main roads in ribbons, radiating from the towns; houses by the hundred thousand are similarly spread out in varigated colour and design. The criticism of this by æsthetes and publicists which we are hearing so frequently are often made without an understanding either of its cause or of the remedy for it.

The time has arrived when decentralisation, begun unfavourably with new and obvious evils, should be guided into rational channels so that its pace will increase and great towns be relieved partly of their mobile industries and population: so that new towns may be created wheresoever suitable sites can be found for them in rural areas. The idea is simple and has been stated with the minimum of words; but when we turn to the question of giving effect to it, difficulties arrive. If we admit that centralisation is valid up to a certain point and has led to the growth of towns, followed by their overgrowth; if we discern the modern tendency to move outwards by means of unpleasant ribbons; if we desire to reduce the older evils of centralisation and to stop the new mode of uncontrolled decentralisation we must find a third alternative and determine whose is to be the guiding hand, to whom he shall speak, and ask whether he will be obeyed.

Happily, the authoritative forces desired already exist in germinal form. Town planning has called to its ranks a goodly number of technical specialists who unite in disliking both the older and newer evils referred to above. They preach and teach with great vigour, and in their surveys and plans they show, in numerous cases, how the countryside may be both preserved and developed. Over a thousand local authorities have entered the regional system, covering the most important and highly industrialised areas of the country. Regional planning has led to the formation of four score joint committees, twenty of which have statutory powers to enforce a discipline upon the development of areas they examine. Many of these technicians speak the last word in respect to decentralisation by finding sites in virgin lands for new towns and by the establishment of industrial villages.

But some critics think the process too slow and its success uncertain unless our thesis is adopted officially and communicated by Government to all those who are concerned with the physical development of our country—and who is not? The idea, they say, must become a national policy; let old towns be reduced in their overdensity. The instrument is ready for use in the "town-planning of built-up areas," an ominous formula. This innocent phrase means slum clearance, street widening, zoning and ventilating the denser areas where factories and humble dwellings are huddled together. It means, as London and Manchester have already found, that a certain proportion of the people must be housed in distant spots and factories and workshops be provided for their industry. In short, it means that new towns, in the likeness of Welwyn and Letchworth, shall be planned under the guidance of the technical wisdom of the professions and backed by the authority of the central government. In this way decentralisation will reach its better phase and be acclaimed as a liberating force. Such appears to be the nature of the arguments which we hear resounding in our ears, and to which, at least, we would do well to listen.

It is not possible here to deal adequately with the problem which has, in these last days, been mentioned in Parliament and discussed in the general press: namely, London traffic. But it must be obvious that if relief is to come it will be largely a physical question and not merely one of organisation, finance and "public ownership." Ultimately, decentralisation is the only saving principle capable of easing the complex evils of overcrowding, excessive density and congestion of urban traffic.

NOTES

Official Architecture.

ALTHOUGH we have not received confirmation of the statement, we have been informed that the attitude of the First Commissioner of Works in reference to the designs for the new buildings to be erected on the Calton-hill site, Edinburgh, is that the plans for the new buildings were commenced before he came into office and he is simply carrying on the policy of his predecessors—which is exactly what, a critic remarks, we might have expected from a Labour Government. But we must not forget that the policy seems to have been initiated by the previous Government and it would be unthinkable, if it were not a fact, that the architectural profession in both England and Scotland, and the art of architecture as well, should be treated in such a way. We have yet to read any sound argument in favour of the attitude of the Government, while the case against their policy has been made again and again with convincing reason. As Mr. F. C. Mears says in his letter to the *Scotsman*: "If victory rests with the officials, they will win more than the design of a building—they will fortify their position; they will standardise in Edinburgh the idea of a London headquarters. If this be so, it will be seen that the dispute in connection with these buildings is based on a more important principle than that of choice of architects; it is intimately bound up with the whole question of local government."

"Serious" Opposition.

IT appears that Mr. Lansbury, First Commissioner of Works, received a joint deputation in Edinburgh from the Town Council and the Sheriff Court-House Commissioners on the subject of the projected building for the site, and is reported to have said he hoped the design to be submitted by the chief architect of the Office of Works would be recognised by all as a building worthy of the site, and he added, according to the *Scotsman*, the interesting statement that, speaking for himself, he would not dream of proceeding in the face of really serious opposition. He is certainly receiving serious opposition. So, if his words mean anything, he will not proceed in the face of this very serious opposition of artistic opinion in Edinburgh and elsewhere.

Charing Cross.

THE body of opinion against the officially adopted scheme for Charing Cross is steadily growing in volume and importance and we are glad to see the firmly expressed opinion of *The Times* that the critics of the Bill are "undoubtedly entitled to a hearing, and the delay for which they ask ought to be granted." "The critics of the Bill contend that the details of the scheme have been conceived and decided upon in too great a hurry and without proper consultation of the bodies qualified to advise on the all-important questions of its architectural and town-planning possibilities." It is clearly borne out in *The Times* article that no fair chance has been given for those best qualified to judge properly to formulate all their objections or to obtain a hearing for any better method of dealing with the problem. Such a scheme as that adopted means the irreparable loss of an unparalleled opportunity to add to the dignity of the centre of the capital and of improving the lay-out of a large and neglected district of South London and the drab conditions under which its inhabitants are now living. Neglect to seize the opportunity thus presented will mean that for all time South London is condemned to be a mere annexe to, instead of a part of, the City of London.

The South Side.

WE suppose it may be taken for granted that we have no authority over London gifted with enough imagination to forecast a future when the south side of the Thames might be made into a decent and dignified part of the city, when the ugly railway bridges have all disappeared, when the ugly viaduct trailing along the south side from London Bridge to Waterloo has been rased to the ground, and when a fine southern embankment provides a foreground to a properly planned scheme of streets and squares on the south side—when, in fact, the incomparable possibilities already hinted at by the fine development on the north side of the river is balanced by an adequate and dignified treatment on the south side. One cannot wonder that now and then those who can see visions of the future exclaim about the mighty possibilities of London.

Newcastle House, Lewes.

IN the course of the recent lecture on "Urban and Rural Amenities," delivered at the Royal Society of Arts by Mr. Morley Horder, the lecturer showed a photograph of Newcastle House, Lewes, which has been the subject of public controversy for some time, and which it was thought by some had been saved, but it appears this is not the case, and slides showing the demolition of the building were given. Considerable interest was taken in these slides, and a request was made to send a telegram to the Town Clerk of Lewes, deploring its destruction. This building could hardly be described as characteristically picturesque, but it will be surprising if anything can be put in its place which will be as satisfying in its relation to the other irregular lines of the street. Apart from any question of architecture, is it not sheer waste to pull down such a building, when it can be adapted to the reasonable requirements of the local authority of a small country town?

Newcastle House, Lewes, October, 1929.

Nuthall Temple.

PHOTOGRAPHS of Nuthall Temple were also shown at the lecture. This is one of the finest examples of Palladian architecture we possess in England. It was pointed out by the lecturer that if the architectural profession regarded Newcastle House as merely picturesque and therefore outside the province of an architectural society, what could be said of the destruction of so noble a building? Apart from the architectural values of the buildings, the view from the colonnade was one of the most characteristic English vistas. Surely this was a possession of the greatest value to Nottingham, especially as it was within a short tram ride from the centre of the town. "It is believed," said Mr. Horder, "that the building was sold for about £4,000 to a builder, and is by now probably entirely demolished. Up till the actual day of the sale everything

Nuthall Temple, Nottingham.

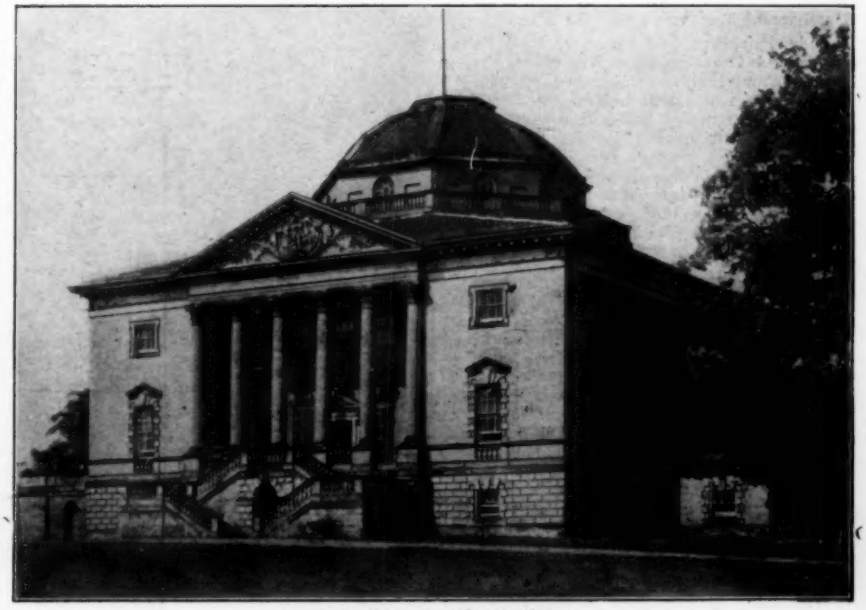
possible was done to arouse public attention, both in Nottingham and London, in the matter. Then, when it was too late, a local paper said: 'The destruction of Nuthall Temple is perhaps the worst piece of vandalism for which—some day—our present generation will be held responsible.' A well-known and rich citizen of Nottingham said he had never seen the place and had never met anybody who had! Such are the depths to which an appreciation of fine architecture has fallen."

The Leasowes, Halesowen. THE Royal Society of Arts was appealed to by the Secretary of the Shenstone Society to help in the preservation of Shenstone's interesting house and surroundings at Halesowen, and Mr. Horder took the opportunity, when near Birmingham, to go and look at the house and gardens. Very little remained of the garden as described, said the lecturer, but the seemly and orderly house of the period (now used as a golf club) remained much as it was in Shenstone's time; and the surroundings, which were threatened by the speculative builder, were still attractive. "I should like to remind the architectural profession in Birmingham (continued Mr. Horder) that although Shenstone ranked as a poet in a rather superficial age, it is really suggested that he should be remembered for better reasons. Disraeli says: 'When we consider that Shenstone, in developing his fine pastoral ideas in the Leasowes, educated the nation into that taste for landscape gardening which has become the model of all Europe, this itself constitutes a claim on the gratitude of posterity. Thus the private pleasures of a man of genius may become at length those of a whole people.' Shenstone died in 1763. The Society of Arts was founded in 1745 as an encouragement to the Arts, and it would be very suitable if the Society could arouse Birmingham to a sense of their responsibility in connection with this interesting literary association in their neighbourhood. 'Your town of Birmingham grows very polite,' writes Lady Luxborough to Shenstone, 'I think the Players who enjoyed the pleasure of your grove should have entertained you there. How delightful would be the Masque of Comus acted on this spot.'"

The Training of Bricklayers. THE Board of Education Educational Pamphlet, No. 78, is devoted to the Bricklayer's Trade and Training. The general conclusions arrived at in this pamphlet are as follows: "While much, perhaps most, of the instruction in bricklaying now provided in our English schools is at least satisfactory, its volume is meagre. The extension of the present provision for this branch of education will involve some outlay on premises, and such outlay at the present time can only be justified by the confidence and support of the representative leaders of the building industry. Those representatives are unanimous in voicing the need for progress towards a higher standard of training. In any case it seems clear that the average young bricklayer will continue to benefit by technical training in schools, whatever the terms and conditions of his employment may be."

Preservation of Rural England. THE Hertfordshire Branch of the Council for the Preservation of Rural England has issued a good leaflet giving suggestions for the preservation of amenities in the design, siting and materials of rural buildings. We are glad to note that amongst the suggestions there seems no opening left for flat roofs and parapet walls, but there is evidently a belief in our old English traditional cottage buildings.

Palermo Churches. THOSE architects who have not been in Sicily have missed much of the greatest architectural interest, set in many cases in surroundings of great beauty. Sicily is an island of the most appealing quality to the landscape artist, and the reader of a small brochure on the Churches of Palermo will have no cause for regret, in reading Mr. Hamilton's enthusiastic comments on the old buildings, that they are not accompanied by more numerous illustrations in support of his discerning letterpress. This little publication should incite many architects to realise at first hand the beauty of Sicily, and especially of the Churches of Palermo.



Nuthall Temple, Nottingham.

GENERAL NEWS

CHRISTMAS HOLIDAYS.

Owing to the Christmas Holidays, all editorial correspondence intended for our next issue should reach "The Editor" by first post on Monday, December 23.

Professional Announcements.

In succession to Mr. David Roberts, Mr. C. T. Butler, Borough Surveyor of Droitwich, has been appointed to a similar office at Lewes, Sussex.

Mr. Walter E. Cross, architect and surveyor, has removed to 52, Heston-road, Hounslow, Middlesex, where he will be pleased to receive the latest catalogues. Telephone: Hounslow 3052.

Wigan Grammar School Extensions.

We learn that Mr. Alan Munby, F.R.I.B.A., Old-square, Lincoln's Inn, W.C.2, has been appointed consultative architect for the extensions proposed at the Wigan Grammar School, which are estimated to cost £40,000.

Royal Fine Art Commission for Scotland.

The King, on the recommendation of the Secretary of State for Scotland, has approved the appointment of Mr. James Miller, A.R.S.A., F.R.I.B.A., to be a member of the Royal Fine Art Commission for Scotland, in the room of the late Sir Robert Stodart Lorimer.

Plans for Chester New Gate Rejected.

The Improvement Committee of Chester Corporation have rejected the plans submitted by Mr. Walter Tapper, past-president of the Royal Institute of British Architects, for the New Gate at Chester, and the City Surveyor is to be instructed to submit designs. It is understood that the objection to Mr. Tapper's scheme, which was estimated to cost £7,000 and was to facilitate road traffic, was on the score of expense.

Rebuilding in Whitehall.

The question of the demolition of the existing buildings and the erection of new Government offices on what is known as the Whitehall site has lately engaged the attention of the Office of Works, says *The Times*. The attitude of the Government in the matter is, we learn, that no plan for new buildings has yet been prepared or considered, and when it has been decided to begin the scheme, architects outside will, in all probability, be entrusted with the preparation of the plans.

Purchase of Runnymede for the Nation.

Lady Fairhaven and her sons, Lord Fairhaven and Captain Henry Broughton, have bought about 182¼ acres of riverside land between Egham and the Bells of Ouseley, including Runnymede, and will present them to the National Trust. The purposes of the gift are to preserve for ever the site where Magna Carta was signed, and to honour the memory of the late Mr. Urban Hanlon Broughton, husband of Lady Fairhaven and father of Lord Fairhaven and Captain Broughton.

The Painters' Hall, City.

Owing to rebuilding in the neighbourhood, Painters' Hall became technically a "dangerous structure," two notices having been served on the Company some three months ago. The Court of Assistants proceeded at once to shore the building up, says the *City Press*, pending full examination. That has now been completed, and the full facts are before the Court. It is clear that costly works are necessary. The Hall is to be closed, so far as functions are concerned, for six months at least, in order that the necessary complete overhaul may be possible. That the Company is faced with a great expense is obvious, for the building is nearly 300 years old, and some of the ancient brickwork is in a bad state.

British School at Rome.

Mr. Ian Archibald Richmond has been appointed to take over the office of Director of the British School at Rome on the retirement, next June, of the present director, Mr. Arthur Hamilton Smith. Mr. Richmond graduated from Corpus Christi College, Oxford, in 1924, and subsequently held the Gilchrist Studentship of the British School at Rome and the Craven Fellowship and the Goldsmiths' Senior Studentship of the University of Oxford. Since 1926 Mr. Richmond has been Lecturer in Classical Archæology and Ancient History at the Queen's University of Belfast.

Station Improvement at Exeter.

Queen-street Station, Exeter, is to be reconstructed by the Southern Railway, at an estimated cost of £196,000, according to an announcement by the company. The present station will be thoroughly modernised. The principal alterations provided for in the scheme include a direct entrance to the station from Queen-street on the existing road level, with new booking-hall and parcels depôt. An entrance with a booking office will be provided by the new north road and a new approach communicating with the platforms. Plans will be under the control of the Company's Engineering Department.

OBITUARY

John Thomas Bolding.

We deeply regret to announce the death of Mr. John Thomas Bolding, on the 15th inst., at his residence, 42, Porchester-terrace, Hyde Park. Mr. Bolding, who was in his 83rd year, joined his father, Mr. John Lupton Bolding, who was then in business as a sanitary engineer in South Molton-street. In 1894 the company of John Bolding & Sons, Ltd., was formed, and they have for many years carried on business as sanitary engineers at the Grosvenor Works, Davies-street, W.1, Mr. J. T. Bolding having been managing director and chairman of the company from its inception until his retirement in February, 1924. Mr. Bolding was a well-known and highly respected figure in the building trade, and a most likeable personality. For many years he took an active part in the affairs of the industry and was closely identified with charitable activities. His loss will be deeply regretted by a wide circle of friends in the building trade and the architectural profession.

COMPETITION NEWS

Proposed Competition for Parochial Hall, Blackpool.

We learn that a limited competition is being held amongst local architects for the erection of proposed parochial hall and Sunday school for St. Mary's Church, Highfield-road, South Shore. The vicar is the Rev. T. Heywood Briggs.

COMPETITIONS OPEN.

	Particulars published in "Builder."	Sending in date.
Municipal pavilion and refreshment rooms, etc., on site of old Waterloo Hotel, for Aberystwyth T.C. Mr. Arnold Thorneley, F.R.I.B.A., assessor. Premiums: £100, £70, £30. Mr. T. J. Samuel, Clerk, Town Hall. Dep. £2 2s.	Sept. 27	1930 Jan. 1
Municipal Buildings, Assembly Hall and Law Courts in Victoria Park, Swansea, for the Corporation. Premiums: £750, £500, £300, £200. Assessor: Mr. H. V. Ashley, F.R.I.B.A. Mr. H. L. Lang-Coath, Town Clerk, Guildhall. Dep. £2 2s.	July 5	Jan. 18
Designs for Anzac Memorial, for the Trustees, to be erected at a cost of £75,000 in Sydney, N.S.W. Conditions from Agent-General for N.S.W., Australia House, W.C.2. Copies also at R.I.B.A.	Aug. 30	Jan. 24
Sixteen-bed cottage hospital at Ongar, cost £3,000. £5 5s. fee. Hon. Sec., Mr. C. H. Foster, Ongar Cottage Hospital, Essex	Dec. 6	Jan. 31
New Police and Fire Stations in Manchester-rd., for Accrington T.C. Mr. H. J. Rowse, F.R.I.B.A., assessor. Premiums of £250, £150 and £100. Town Clerk, Accrington. Dep. £2 2s.	Oct. 4	Feb. 28

Prevention of Fire.

We have received from Dr. F. J. Waldo, H.M. Senior Coroner for London, a card setting forth concisely warnings and safeguards for following in the event of fire. Copies of this very clearly-set-forth card should be in the hands of every owner and tenant of factories, houses, offices, etc., and may be obtained from the County Purposes Committee, Guildhall, E.C.

The Leasowes, Halesowen (William Shenstone's House).

(*See page* 1045.)

CORRESPONDENCE

Damage to Structures by Vibration.

SIR,—The Department of Scientific and Industrial Research have recently issued a report made by the Building Research Board for 1928, but a remarkable feature (says the *Morning Post*) of this report is the statement in the Appendix I that "no direct investigation of the vibration of structures has yet been attempted." This, in view of the enormous increase in road traffic both in London and throughout the whole country and the consequent additional vibration, is somewhat remarkable. The damage done to buildings due to subway traffic has been—owing to the very special care exercised by the engineers and contractors—very small; but that much harm has been, and still is being, caused to buildings by street and road traffic is, I think, widely realised. Owners and occupiers have undoubtedly a claim to some assistance from the powers who have control of the roads and thoroughfares, and the prevention of damage can only be attained by minimising the vibration.

The tendency to use the roads for heavy transport instead of the canals and railroads has led to heavy lorries being built for the transit of goods. This licence has not been stemmed or checked by authority because, apparently, the road-users have forestalled the authorities; *i.e.*, if there exist any authorities who could have prevented, or can now prevent, our roads being used for this ponderous traffic! Roads were never intended for such traffic. When our buildings are subjected to intense vibration we are entirely unprepared to resist it. The building owner cannot shift, at will, his house, and he could not foresee that his property must one day be subjected to this danger from vibration. This danger has been imperceptibly and rapidly sprung upon him. One sees notices on bridges prohibiting loads over a certain weight being taken over them, and if this danger can be avoided, why should buildings quite as unable to resist the shock be subjected to any damage from such loads without a power of veto?

One cannot—by the very reason that damage by vibration is of a cumulative kind—fix the responsibility for the damage caused on any particular party. *D* blames *C*, *C* blames *B*, and *B* blames *A*, *C*, and *D*; and after much anxiety, worry, and discomfort, the owner has to saddle expense of restoration, only to feel that when he has repaired the damage the danger still exists and probably will become worse and worse. Readers of *The Builder*, perhaps, will say, "we agree"; but it might evoke comments and be a help to owners if some of your readers could suggest some way of stemming the possibility of this menace to property being permitted and continued.

EDWARD A. JOLLYE, A.R.I.B.A.

Charing Cross Development.

SIR,—It was with much pleasure I read the interesting editorial article in *The Builder* of the 6th inst. The development of the Charing Cross site is not a private enterprise of the Southern Railway Co., but a public undertaking of the nation. The British taxpayers will have to provide the money, so it is only reasonable they should have a voice in deciding what shall be done, and it is hoped the views of the R.I.B.A. will be considered by Parliament.

It would seem the Lambeth Council propose big, unnecessary roads improvement in their district, which really has nothing whatever to do with the bridge or the new station, so if they want these improvements they should, in the usual way, pay for their cost out of the local rates, and not unfairly include them in the Government scheme. The simplest way of developing property is, of course, the cheapest, and an expenditure which does not give an adequate return is a financial folly; therefore, the new plan should be thoroughly considered by Members of Parliament.

I cannot help thinking my plan for the development of the south side is the best (published in *The Builder*, July 27, 1928), as one new road is sufficient and a vast sum would be saved; but if more platforms are required in the station, more adjoining land could be obtained. One road on the north side (see *The Builder*, June 8, 1928) would save enormously, and provide vast incomes otherwise wasted; but the road might be shifted farther east.

FREDK. NESBITT KEMP.

The Drawing of Architecture.

SIR,—The writer of the article, "The Drawing of Architecture," which appeared in *The Builder* of November 29, will doubtless be thanked by all those who have been unfortunate enough to take up this study. There is no point in his article to which one can take exception, but there are one or two points which might be enlarged upon, and, taking them in their published order, they are as follows:—Firstly, "photography plays so large a part in our illustrations." It is difficult to understand why, for camera perspective is a distortion of what the eye sees. Yet, as the late Joseph Pennell wrote, the majority of editors prefer to encourage photography, thus educating the public in distortion. Secondly, "a fine dashing coloured drawing . . . may catch the eye, but that is hardly a compensation for the architect," and "the over-emphasis of parts destroys the unity of expression of the whole." Now never have I advocated or sought in my own works the emulation of this "fine dashing colour" or "over-emphasis" style of the drawing of architecture, believing as I do that it is an insult both to the trained and the untrained (or latent) artists. Constable, I believe, made rough and hurried drawings from which he prepared his masterpieces, but he did not consider the former sufficiently finished to show. Truly, as your leader says, "we have had enough of the theatrical and the uneasy restlessness of modern drawings." Thirdly, and lastly, this question of the "architectural room at the Royal Academy." I cannot understand why the R.I.B.A. persists in sheltering under the R.A.'s wing; I think this policy shows a lack of self-respect on the part of architects—I might even say a lack of respect for an art which is by far the greatest art of all.

O. NEWBOLD.

ECONOMICS OF BUILDING

BY A CORRESPONDENT.

[Various proposals have been made from time to time on the subject of the economics of building, and it would appear from the following communication, received from a correspondent, that the matter is still receiving the attention of the industry.—ED.]

THE building industry plays a two-fold part in the economic life of the nation: on the one hand, it constructs a workshop, factory, office, or domestic building, the nature of which affects very materially the output of work, both in quality and quantity, according to the operative convenience of the structure, and also according to the healthiness of the surroundings it provides for the workpeople. On the other hand, it purchases and uses vast quantities of material from the supplying industries, and employs a great number of operatives directly in building and indirectly in those trades catering for building components and materials.

Whatever causes militate against building and rebuilding are therefore doubly effective in retarding the industrial expansion of the country, and any steps taken in the direction of reducing the cost of building and increasing the efficiency of constructional work must confer a considerable benefit in stimulating employment in the building trades. In this direction the British Steelwork Association has taken the lead, and has secured the co-operation of the Department of Scientific and Industrial Research in an investigation into present practice and regulations in respect to steelwork, from which great benefits are expected to accrue.

A very potent drag on the building industry is the lack of co-ordination in the building regulations of the country, and their failure to keep pace with the advances made in the technique of constructional materials, as, for example, in the prescription of materials originally intended as weight-bearing mediums, *e.g.*, brick, stone, etc.: which, under the present system of steel frame construction, have nothing further to bear than their own weight, but are still used almost to the same extent, although now they merely function as protective casings. The purpose of a large percentage of the brick and stonework now employed could equally be met by lighter construction, and the economies effected would be reflected in increased building operations, and, in consequence, increased prosperity in the building industry generally. Building operations are among the most fruitful sources for the circulation of capital, and in these days of national financial stress it is all the more desirable that every facility be afforded which will encourage enterprise in this direction.

On the question of building regulations, there are probably hundreds of differing codes or sets of regulations and by-laws applicable to England and Scotland which by their diversity impose a distinct element of cost and inconvenience to architects, engineers and building contractors generally, and this in so small a country as Great Britain, with no physical conditions or other practical reasons warranting such general differences. Moreover, every set of regulations is administered by a local authority and has a different official to supervise the works executed under them, whose interpretations of the requirements may be an unknown quantity, but is, in all cases, final. Thus any question arising under these regulations can only be dealt with in the particular town or district in which they apply, there being no central organisation in the country to which matters relating to one of these sets of differing regulations can be referred.

It is obvious, therefore, that the cost of a building is increased by the necessity of observing every idiosyncrasy of such regulations, by the localising of tenders for constructional work, whereby highly efficient contractors are barred from quoting for available contracts by reason of the impossibility of assimilating and accounting for the details of remote local regulations. For these reasons it is evident that immediate revision and co-ordination of building regulations is called for in the interests of national efficiency, and that attention in the first instance might be directed to the following features of the problem:—

(1) That regulations are localised and differ very materially in various administrative districts, and are subject to variation in interpretation.

(2) That they fail to take full advantage of the advances of scientific knowledge, in particular as regards steelwork practice, and pay insufficient regard to the newer materials or forms of construction that recent research and experience have placed at the disposal of the architect and builder.

(3) That the adaptability and modernisation of building is both difficult and costly as a result of the type of construction conformable to these regulations.

As regards (1), it is clear that the wide variation of building regulations now in force in different parts of the country not only adds to the cost of building, but also robs the building contractor and his client of the advantages of uniformity in practice which is necessary to efficient and economic design, and that in those cases where a power of waiver permits the administrating authority to depart from certain features of the regulations, such waiver entails special application, and should be restricted rather to zoning and heights than to features of design *per se*.

THE EFFECT OF BUILDING BY-LAWS ON RURAL BEAUTY.

A MEETING of the R.I.B.A. was held on Monday, at 9, Conduit-street, Sir Banister Fletcher (president) being in the chair. A vote of condolence was passed with the relatives of the following deceased members:—William John Hale, elected Fellow 1901; Keith Downes Young, elected Associate 1873, Fellow 1885; and Frank Walford Locke, transferred to Licentiate Class in 1925.

Mr. M. H. Baillie Scott, F.R.I.B.A., then opened a discussion on rural by-laws and their effect on the beauty of the countryside. To what extent, he asked, did building by-laws obstruct architects who were trying to build in harmony with rural England? And was there any practical excuse for such obstruction? By-laws had been introduced about 1850, when building was at a low ebb, and the great idea had been to give height to rooms, while floor area was ignored. It was all part of the architectural snobbery of that time, which expressed itself in villas with lofty ceilings and bay windows shrouded with lace curtains. To-day, when we had different values, we realised the importance of having as much elbow-room as possible for our money, instead of investing it in useless space overhead. We had even discovered that cottages were beautiful. An inconsistent situation arose, for on the one hand there was an outcry for the preservation of old villages, whereas, if the by-laws were made retrospective, most of the cottages in those villages would be condemned on the ground that the windows were too small and the ceilings too low. To the superficial observer the charm of an old village consisted in the effect of time and weather on the buildings, but really the essential quality was what was called scale; and in the case of a cottage built to-day scale was ruined by the by-laws. Even more absurd than the regulation requiring every ceiling to be 8 ft. high was the one insisting on a 5 ft. height of wall in attics. As a consequence of this, floor space and cubic space were reduced, so that this by-law made it impossible to use the roof space of an old cottage for bedrooms. The cottage was the best model for small country dwellings, but because the roof space could not be used, bungalows were built instead. In the country by-laws should deal only with sanitation, and that of a reasonable kind—not the sanitation of the specialist, who was apt to become a faddist. No regulation as to height of rooms was necessary, nor any as to size of windows, because these were usually made too large. Apart from the by-laws themselves was their interpretation by the local surveyor, and here it was desirable to have a court of appeal. The average rural council knew nothing about building. Another consideration was the expense due to by-laws: "extras" were largely due to the unreasonable demands of district surveyors. For instance, in a block of flats of fireproof construction, with stone floors and iron staircase, an external iron staircase was demanded as a further protection from fire. This cost £600, and it was in a town where nothing of the sort existed in the old-fashioned timber-built buildings. Another matter in which by-laws were unreasonable was in requiring the minimum size for a joist exceeding 8 ft. in span to be 9 in. by 3 in. In a certain old cottage, for a 10 ft. span joists of 3 in. by 4 in. had stood the test for several hundred years. This matter could only be considered in relation to the thickness of the floor boards.

Reverting to the height of rooms, if ceilings were high more space had to be occupied by the staircase, and so much more space given up. The factor of space came in again: a room 12 ft. by 12 ft. and 7 ft. high gave the impression of a good-sized room of cottage scale; but if the ceiling was raised it looked like a small room. The by-laws gave direct encouragement to the disfigurement of the countryside with hideous little houses, and did not realise that a cottage wisely built could be a beautiful thing. Why should not the by-laws give a lead to the builder in the right direction, giving advice as to cottage building which should leave us no longer ashamed of country building? If we could recover the old art of cottage building, we need not worry about the destruction of old cottages, for every cottage we destroyed we could replace with one more beautiful still.

Mr. Edward Willis (chairman of the Council of the Royal Sanitary Institute) said the first by-laws were framed by architects who were members of the R.I.B.A. Apparently Mr. Baillie Scott appreciated many by-laws, but seemed troubled with that in regard to height of ceilings. Many years ago he (the speaker) had a relative, the owner of some old cottages, for whom he occasionally collected the rents. Many of the residents in these cottages did not appreciate the fact that windows were made to open, and when he was shown into a room only 6 ft. high that had not been opened for a week, and where the windows were never opened at all, he wished the room had been more than 6 ft. high. He was glad such places were not built now. He agreed with Mr. Baillie Scott as to scale, and agreed that some local surveyors worked according to the letter of the by-laws rather than in their spirit. As to external fire escapes, he fully approved of providing for the safety of the people who lived in flats. If we took Mr. Baillie Scott's views literally, we should have the countryside filled with cottages that he would be very grieved about, for by-laws were instituted to protect the public against the jerry-builder, who, if there were none, would take advantage of the fact to give worse conditions, but without beauty. An architect could design a modern cottage with rooms of 8 ft. pitch and make it beautiful. It was absurd to talk of the tyranny of the local surveyors, for these were afraid of the architect, and looked up to him with awe and reverence. Slips were occasionally made in the architect's office—not by the architect himself, but by his assistants—and when these occurred it was well there should be a qualified man to point out the mistake. He (the speaker) had on several occasions received the thanks of architects for drawing attention to such slips. With regard to the room in the roof, he had made a point of staying at some of the older hotels in the country, and had been put in attic rooms, where not only had he knocked his head against the hips, but had found the room horribly close. He did not admit that if there were no by-laws requiring the walls to be at least 5 ft. high, there would be more cubic space: there would be more floor space, but the triangular space going down to zero at the extreme corner could not be used.

Mr. G. L. Pepler (Ministry of Health) said the chief point of attack was on the height of rooms. But the number of local authorities who dealt with that question was very small. In the matter of construction, his opinion was that by-laws were not stringent enough—it must be remembered that the majority of cottages were not designed by or built under the supervision of an architect.

Mr. A. N. C. Shelley (Ministry of Health) said one thing architects objected to was that by-laws differed in various areas. The by-laws were probably too diverse, taking the country as a whole, but they were a great deal more uniform now than ten or twenty years ago. That was because for a generation the central authority had been urging the local ones to bring their by-laws up to date. With certain important exceptions, nearly all by-laws had been brought up to date within recent years, or else were—as Mr. Baillie Scott had suggested all by-laws should be—restricted to sanitary regulations. The Ministry of Health's model by-laws were now revised and reprinted about every eighteen months so as to take advantage of every new idea of architects and others, and architects should let the Ministry know if they found difficulty under the by-laws. Mr. Baillie Scott's chief complaint had been on the score of height of rooms, but out of 655 rural districts in the country, only 50 per cent. had by-laws with regard to the height of rooms. Such by-laws were practically confined to London, Lancashire and the largest towns. By-laws with regard to external staircases were extremely rare, as were also by-laws with regard to the size of joists and the size of timber in buildings. Over twelve hundred local authorities had in the course of the last few years adopted up-to-date by-laws in substitution for more stringent ones previously in force.

Mr. W. Harding Thompson said the rural districts of this country were suffering disfigurement very largely because there were no by-laws in operation. He agreed there was a difficulty in designing a single cottage with rooms 9 ft. high, but it was not so difficult with 8 ft. ceilings, and there was no difficulty at all to a competent designer if the cottages were in groups of two or more. As to windows, it was a confession of failure on the part of an architect if he could not get scale when designing windows as large as hygiene required. Many rural districts were entirely without by-laws, and without by-laws any number of shacks, sheds, timber garages, and so on could be put up, probably disfiguring the countryside far more than the isolated cottage built rather higher than those of a hundred years ago. Some architects, at any rate, approved of by-laws to control the speculative builder, who built 95 per cent. of the houses of this country.

Mr. Edward Warren said he had been responsible for building cottages, and in his early days took a small farmhouse built in the cottage manner. He had found then that a room 7 ft. 6 in. high could be perfectly healthy if the windows were carried up nearly to the ceiling. But if the room were 12 ft. high, and the windows were low down, there was a stagnant pool of air above those windows.

Mr. G. W. Wilson (Guildford Building Surveyor) said the only point on which he could find that an architect might have a real grievance was that requiring tiles, when used vertically, to have 4½ in. of brick behind them—they were considered as sufficient protection for the roof of a house, but not for its sides. As to height of rooms, even architects, generally speaking, thought 8 ft. was not unreasonable. So, also, windows were required to be one-tenth of floor space: he did not suppose anyone in the room would think that too much. One point to remember was that, by-laws having been made, it was the duty of the council and local surveyor to see they were carried out.

Major H. C. Corlette said he did not agree that 8 ft. was a necessary height for rooms in cottages: 7 ft. was sufficient for

health, light and ventilation. One-tenth of the floor space was not essential as the area for windows, and too much glass lowered the temperature of a room and made fires necessary when otherwise they would not be.

Mr. Percival Blow said the discussion was disappointing to those who had come up from the country in the hope of hearing something about restrictions. The only thing Mr. Baillie Scott objected to was height of rooms and height of ashlaring. But there was a lot to complain of in local by-laws. For instance, a house could not be built with a thatched roof if within a certain distance of another house; and if the meeting would discuss such questions as that, it would be getting at the things which affected the beauty of building in rural areas.

Mr. R. Wynne Owen said by-laws had contributed to the health of the people. He knew of cottages that were built long before the advent of by-laws. These cottages were artistic, but the occupants had no idea of hygiene, and never opened their windows; and if they had opened their windows, these would still have been too small. By-laws need not be a bogey to the architect, and Mr. Baillie Scott was one who had by his own work pre-refuted his own argument that beautiful cottages could not be built in accordance with modern by-laws.

Mr. Arthur Keen said the difficulty that presented itself to the framer of by-laws was that one could not possibly legislate for every contingency. If one-tenth of floor space was sufficient for windows on the ground floor, it was more than was necessary higher up; and if it was enough on the north side, it was more than enough on the south side. He had a friend in a Government Department whose time was mostly spent in trying to get round the law in cases where the law inflicted hardship. A height of 8 ft. for ceilings was unnecessary. He had built a great number of cottages with rooms only 7 ft. 3 in. high, and in his own house the best rooms were only 7 ft. 9 in. high. But in the matter of rural beauty we had suffered more from the lack of by-laws than from their operation. It was in the places where there were no by-laws that the very worst things were done.

Mr. W. J. H. Leverton said Mr. Baillie Scott had referred to the height of ashlaring in attics, but had not referred to the amount of flat ceiling. In most districts one had to allow half the area of the room, which was reasonable; but some councils required two-thirds, which was excessive.

Mr. A. H. Baines said by-laws were framed, not only for architects, but for so-called builders, and framed for the worst possible cases. An architect should not be tied down like a jobbing foreman doing a little bit of work in his spare time.

A vote of thanks having been accorded, Mr. Baillie Scott, replying to the discussion, said so many points had been raised that he could not deal with them all, but he would like to refer to the one that there were many districts in which by-laws were not in force. He could only speak from his own experience, and say that in practically all the districts he had built in, he had been worried by by-laws as to height of ceilings and so on. It was said that in places where there were no by-laws there were all sorts of shacks and sheds, but he was always inclined to think that if building was to be a disease, it had better be temporary than chronic. Shacks and sheds would disappear shortly, and he preferred them to the by-law solid ugliness.

Ashurst Mill, Sussex.

Ashurst Mill, a well-known landmark in Sussex, has been blown down by the recent gale. It had stood for more than two centuries, and was the oldest peg and post mill in the county.

THE A.A. PANTOMIME

This year's theatrical production of the A.A., though called a "pantomime," is more in the nature of a revue, consisting as it does of a prologue and five sketches, punctuated by interludes and rounded off with a finale. The whole production is rather more ambitious than usual, and the architectural element is not quite so prominent as it has sometimes been in the past. There are, however, three essentially architectural sketches, and we propose to refer to these first.

The cleverest, in our opinion, is the one entitled "England Preserved" (performed by fourth-year students). In this we are carried forward to "about A.D. 2000," by which time, according to one of the characters, "every bit of England is built over except the north side of Westminster Abbey," and rural England has been reduced by a process of attrition to a single cottage at Portmeirion; even this is threatened with destruction, as the site is wanted to provide an entrance to the Transatlantic Tunnel. The State is apparently divided into Ruralists and Urbanists, the former desiring to preserve the cottage (which they have equipped with rustics, who give daily recitals in dialect) and the latter to demolish it. The Urbanists conspire to blow it up by means of an infernal machine, but the nefarious deed is frustrated, and rural England is preserved. This bald outline of the plot does nothing to convey the exotic cleverness of this little sketch, to the effect of which the *décor* and futuristic costumes (made, we believe, from American cloth) contributed in no small measure. Next in order of merit we are inclined to place the "Decline and Fall of a Greek Detail," the scene of which is laid in a room in the British Museum, where the endeavours of two members of the cast to simulate respectively a bust of Phidias and a Caryatid create a good deal of entertainment. When the room becomes crowded with students (second year) and lecturers, we are treated to some *obiter dicta* which have all the authentic ring of the studio, as, for instance, "Let's go to lunch; it's a quarter to eleven"; "Drawing is a very difficult thing: it is principally an attitude of mind"; and "If I were you, I should begin again." The whole thing is an excellent piece of fooling.

Excellent, too, was the contribution of the fifth-year students, a sketch having for title Aldous Huxley's aphorism, "There is no effective substitute for talent." The talent in this case belongs to an A.A. student who, during an all-night A.A. dance, endeavours, amid distractions, to produce a masterpiece of design. He falls asleep and an elderly aunt comes in with a commission to design a monumental group of pig-sties. Horrid apparitions appear, mocking laughter is heard off stage (memories of "The Immortal Hour"!) and the student wakes to find himself surrounded by a crowd of laughing fellow-students. More good fooling, this, with a distinct touch of the grotesque.

"Colour Esquisse," an interlude, provided an opportunity for some good-natured fun at the expense of the British workman. Two painters are painting a hoarding, one with red and the other with green paint. Discovering the diversity, they consult the specification, only to find that they should be using yellow.

"'Phoning for Help" (second year) and "The Waltzing Mouse" (third year) had no architectural interest, but they provided agreeable entertainment with their Cochranesque cleverness and unexpected endings.

The finale, which followed an amusing topical song entitled "That's What an Architect is For," brought together an octette for some clever concerted dancing and singing, in which the whole company finally took part.

The whole production was excellent, the book witty, the lyrics clever, the music (what little there was of it) melodious and pleasing, and the acting always competent, and in some cases extremely good. Where all did well it would be invidious to mention particular performers, and the complete cast would occupy more space than we can afford.

The pantomime has been performed to crowded houses every night this week, and the last performance takes place to-morrow night. The proceeds, we understand, are to be devoted to charity.

CHARING CROSS BRIDGE

IN the course of a letter to *The Times*, Mr. R. W. Perks writes:—"It is, I think, not generally known that the average number of passengers using the Charing Cross Station every day is at present 52,000, or 20,000,000 a year. Owing to the electrification of the Southern Railway suburban lines, this number is rapidly increasing. In order to provide for this traffic, Lord Lee's Commission, in 1926, suggested a station in the Strand, and stated that they regarded the removal of the Charing Cross Station to the south side of the river as an unnecessary disturbance of existing railway facilities, which now serve many thousands of passengers daily." After pointing out other disadvantages of the proposal, the writer concludes:—"It is evident that the project requires further consideration. Lord Esher's advice to Parliament to reject the Bill on second reading is the only way in which this object can be attained."

Mr. Thomas H. Mawson, writing to *The Times*, says:—"The letter from Professor Adshead appearing in your issue of December 5 points the correct and only possible solution of the difficulty of so carrying out this great project as adequately to meet all possible æsthetic and practical requirements. He is probably right in his assumption that the present design has been built up on a process of the gradual elimination of engineering difficulties, but æsthetics demand more than this. An architectural conception must be more than a mere negation, the expression of an idea more lofty than that suggested by the following of a line of least resistance.

"This does not mean that the engineering plan as we have it is useless. On the contrary, it is an essential preliminary to the creation of a scheme in which the architect may work in happy collaboration with the engineer. Only by such a combination can we hope to obtain the best humanly possible in the circumstances, and such a competition as Professor Adshead suggests is probably the only means of achieving this.

"One essential condition, however, must be fulfilled: if the architect is to realise the best that the opportunity presents he must be supplied with full and adequate information as to all those practical factors, great and small, the consideration of which has resulted in the production of the present scheme. This would appear too obvious to mention were it not that in quite a number of cases of competitions with which I have been connected, either as professional assessor or competitor, I have subsequently found the whole of the work done in connection with the competition, and often extending over a period of months, rendered more or less abortive, simply through the lack of information on technical points with which the competitor from a distance could hardly hope to be familiar."

Mr. William Whitehead's Estate.

Mr. William Whitehead, A.R.I.B.A. (43), of 15, Moor Park-drive, Headingley, Leeds, and formerly of 103, Potternewton-lane, Leeds, a director of Alfred Whitehead, Ltd., of Prudential-buildings, treasurer of the Leeds and West Yorkshire Architectural Society, left £4,890.

ILLUSTRATIONS

PLATES

Wadham College, Oxford.

We give this week a reproduction of a drawing of Wadham College by Mr. Walter M. Keesey, A.R.I.B.A., of whose work several other examples have recently appeared in our pages.

The "Rose and Crown," Cambridge.

This public-house, of which Mr. Basil Oliver, F.R.I.B.A., is the architect, was recently awarded a bronze medal as being, on the recommendation of a jury of assessors—four architects and five laymen—the best building erected during 1928 in the area administered by the Essex, Cambridge and Hertfordshire Society of Architects. The building is of quiet and dignified design, in the English tradition. The walls are faced with Luton bricks—browns and purples, with a few reds, the browns predominating—and the roof is of hand-made, sand-faced pantiles. Ancaster stone is used for the bolection moulding surrounding the main door and for the panels of the Rose and the Crown above, all these having been carved and masoned by Mr. Laurence A. Turner, F.S.A. In the tympanum over the doorway, specially designed to take it, is the medallion of the owners, Messrs. Greene, King and Sons, Ltd., designed as a standard emblem for all their public-houses by Mr. George Kruger Gray, and carried out in glazed and coloured earthenware. The builder was Mr. William Sindall, of Cambridge, and the contract price was £4,440.

"Cobham," Edenbridge.

The house is built of red bricks with hand-made tile roofs and weather tiling; the internal joinery work, together with the window frames and external timber work generally is done in oak. The architect was Mr. Arthur Keen, F.R.I.B.A., and the builder, Mr. Percy Langridge, of Edenbridge.

R.A. Student's Drawings.

These drawings have been awarded the R.A. Gold Medal and Edward Stott Travelling Studentship (£200). The full awards in the R.A. competitions were given in our last issue.

Branch Art Gallery Competition, Birmingham.

The award in this competition was given in our issue for December 6, when the first premiated design, by Messrs. A. Edgerton Leeson and A. L. Snow, A.R.I.B.A., was also illustrated. We give this week the second premiated design, by Messrs. D. G. Walton, A.R.I.B.A., and T. Wynne Thomas.

Falmouth Hospital.

Designed with four single-story wings radiating from a centre double-story block, the plan of this hospital has been decided on as being most suitable for the sloping site, most convenient for working and giving the maximum light and air, with good cross-ventilation to all the wards, while yet no ward is overlooking another. The four single-story wings contain (1) men's ward for 12 beds, with duty room and accident ward; (2) women's ward for 12 beds, with duty room and observation ward; (3) children's ward for eight cots, with duty room; (4) the operating theatre, with anæsthetising room, sterilising room, and doctors' dressing and consulting room. Each of the three wards has a cross-ventilated sanitary annexe attached, opening from the wards, and also a paved terrace on to which the patients' beds can be wheeled out for open-air treatment, and the ends of men's and women's wards are arranged as convalescent sitting rooms.

The central double-story block contains private wards and maternity department, nurses' dining-room, and kitchen premises on the ground floor, with accommodation for nursing and domestic staff on the first floor. Communication between the various wings is obtained by a wide, well-ventilated and lighted corridor, at one end of which is a covered entrance from the level for stretcher cases.

The elevations are kept very simple and designed in a plain Cornish Georgian style, with plastered walls and Delabole slate roofs, with widely overhanging eaves. A feature has been made of the main entrance. The floors of wards are of oak boarding, with composition floorings in sanitary annexes and terrazzo floor and wall linings in operating theatre. The windows throughout are of metal. Central heating throughout, electric lighting, and the most up-to-date sanitary fittings are included.

Messrs. Cowell, Drewitt & Wheatley, LL. & A.R.I.B.A., are the architects.

Store Building, Manchester.

This building has been recently completed under the supervision of Messrs. North, Robin and Wilsdon, on behalf of Messrs. C. and A. Modes, Ltd. It is fronted on two sides with faience, the lettering and decorative ornament being in faience coloured during its manufacture. The framing round the windows is in the same material, and the whole of the superstructure is set back slightly to avoid the appearance of being supported by glass. About 6,000 ft. super of the ground floor is devoted to arcades and windows, the latter having a run of 400 ft. The windows are illuminated by 490 lights, these being screened from view by valances, hooked to a wire mesh suspended 3 in. from the ceiling, and movable to any desired position. A transformer station is contained in the basement, reducing the supply of current to 210 volts. The total cubic capacity of the building is 574,000 ft., and the whole was completed and handed over in 8 months 15 days.

Following is a list of the principal contractors:—The Russell Building and Contracting Co., Manchester, main contractor, including demolition and floors; Redpath, Brown and Co., Ltd., steelwork; Shaw's Glazed Brick Co., faience; Saunders and Taylor, heating; Strand Electric and Engineering Co., lighting; Etchells, Congdon and Muir, lifts; Samuel Elliott, Reading, furniture, window backs, glazing, etc.; Stevens and Adams, wood block floors.

MODERN ILLUMINATION

A DISCUSSION on this subject took place at a meeting of the Illuminating Engineering Society, held in the Lecture Theatre of the Home Office Industrial Museum, Horseferry-road, S.W.1, on December 10, the chair being occupied by the President (Dr. J. W. T. Walsh, Director of the National Physical Laboratory, Teddington).

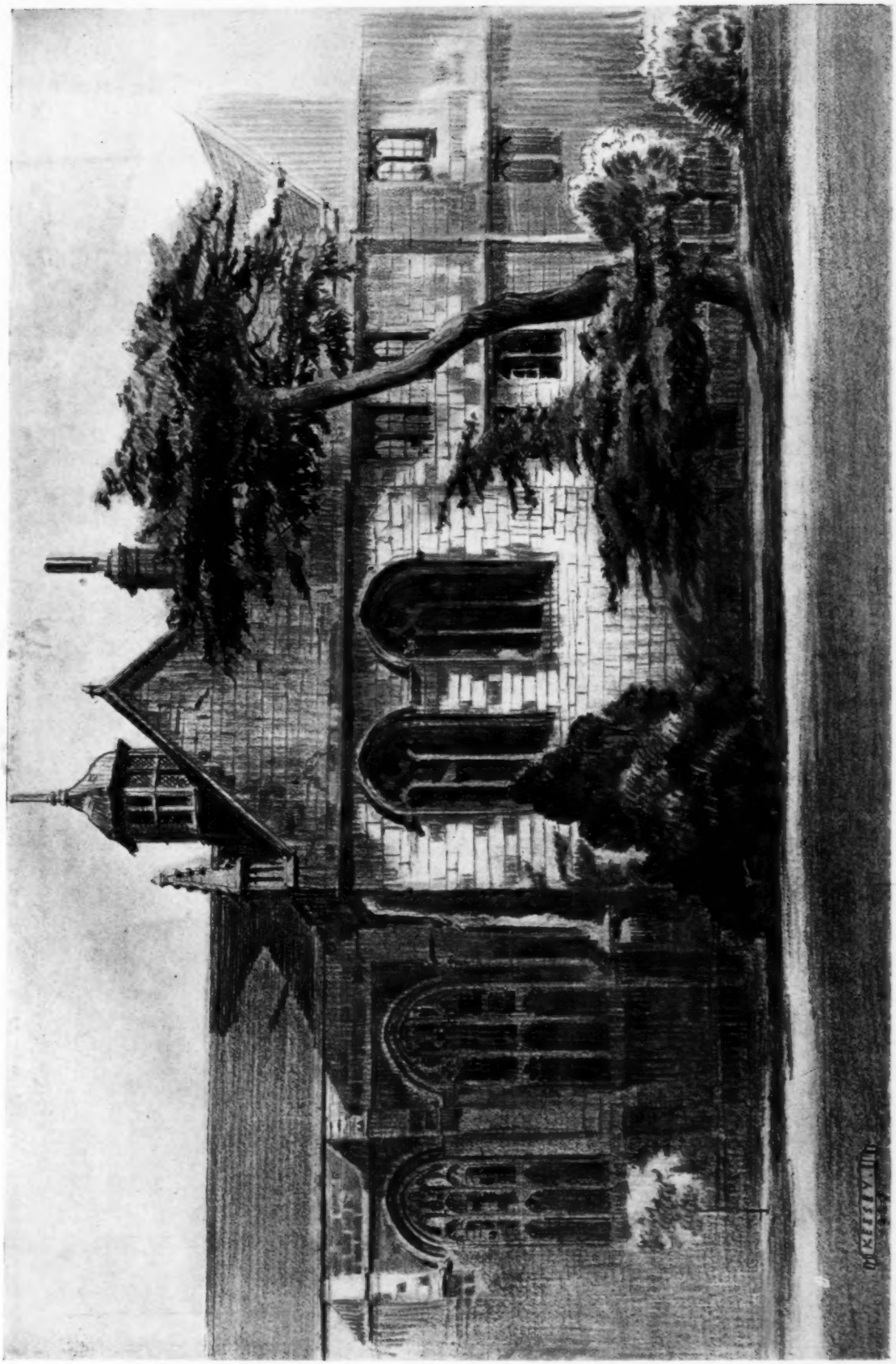
Mr. Howard M. Robertson said in England architects had not taken full advantage of the technical resources of the electrical trades, nor of the advice that was at their disposal. On the Continent, he still felt they were much ahead of England in dealing with the problem of internal and external lighting. In the particular problem of the lighting of the Savoy Theatre, which had been carried out by himself and partner, their object had been to get an effect of sunlight without any glare, so that the audience might have that feeling of comfort that the sun imparted. To get this the light had to come from above, but without casting any shadows. After various experiments had been carried out, they had found that this could be done by reflecting light at various angles, so that it hit the gilded surfaces of the walls and shone off them on to the people. The lights above the upper balcony, however, they kept cool in tone, as this part was apt to be hot in itself. There they had a blue ceiling, and had cast their light directly upon it. The front part of the ceiling was coffers, and these were open, and above them were lights. Those lights were concealed on the audience side of each square, and cast their light on to reflectors above each square, which again reflected the light down and on to the side walls. The reflectors were originally white stoved, but this had produced too great a glare, so they had painted them with gold paint, thus making the light colour perfect for their purpose. This light, in the forepart of the house, was aided by a string of lamps round the front of the balconies. This strip was concealed in a plaster trough, and the balcony front above it was gold, so that the reflected light was sunny.

All this was comparatively easy, but the lighting of the undersides of the balconies was difficult, as there was very little height to play with. There they had put sunk panels, which were silvered, and consequently picked up reflections, and at the far end they had lamps shaded with golden glass, which glittered down the panels. As some of those panels were curved in surface, they picked up the light well. At the back of the dress circle ceiling they had another trough casting light on to a cove, and at the back of the stalls some reflectors to cast light on to the fluted walls. All the walls being gold and shiny, they picked up light from everywhere, and there were no dark corners. They had no electric fittings as ornaments in front of the house, but in the corridors and bars they had some quite simple ones made of glass.

Mr. Basil Ionides said, with the exception of a few isolated signs and shelters, London offered very little æsthetic pleasure in the external lighting of its buildings, and enterprise seemed to have stopped short at flood-lighting and the use of the Neon, which was, however, used for the most part without taking advantage of its charming possibilities. In the lighting of the new approaches to the Savoy Hotel and the Savoy Theatre fronts, the designers had attempted to employ lighting as a more definitely architectural and decorative element. For the lighting of an entrance to an hotel of the class of the Savoy, lighting too theatrical or too much on *reclamé* lines would be unsuitable. What was required was practical illumination, cheerfulness, a note arresting but not indiscreet, a sense of invitation. For the lighting of a theatre front, a higher key might be employed. But at the Savoy the problem was complicated by the proximity of hotel and theatre, and the fact that the façade of the latter formed part of an *ensemble*, and was also the main feature visible from the hotel grill room. Advertisement, therefore, had to be discreet, the effect amusing but not bizarre, and light must not interfere with the daytime architectural effect. The courtyard scheme was based on the covered approaches. The basic idea was to lead people towards the hotel and theatre, and achieve some sort of a climax in the courtyard; to this end the lighting effects were carefully considered. It must be realised, however, that suggestions for treating the actual hotel front were not yet realised, and the *ensemble* was therefore incomplete.

The lighting of the shelters had been carried out by a series of closely spaced bulbs on the outer edge of the soffit. These were concealed in a "V"-shaped trough of flashed opal glass. It was desired that the line of light should be continuous, and that no metal work should show. This had been realised, but certain economic reasons had prevented the effect from being devoid of spottiness, which the architects would have wished to obviate as far as possible.

The troughs continued up the risers of the shelter adjoining the arch, and across the soffit of the latter. In addition, the soffit across the roadway was lighted by large lighting boxes contrived in the thickness between the arch beams. There was also, on the face, a trough which lighted upwards into the steel face of the arch. On this face were large letters of gilded wood. These were projected several inches from the steel face, leaving room behind the letters for tubes of green Neon. The lighting was thus less obvious, and the letters retained their clean appearance in the daytime.



Wadham College, Oxford.

From a drawing by MR. WALTER M. KEESEY, A.R.I.B.A.

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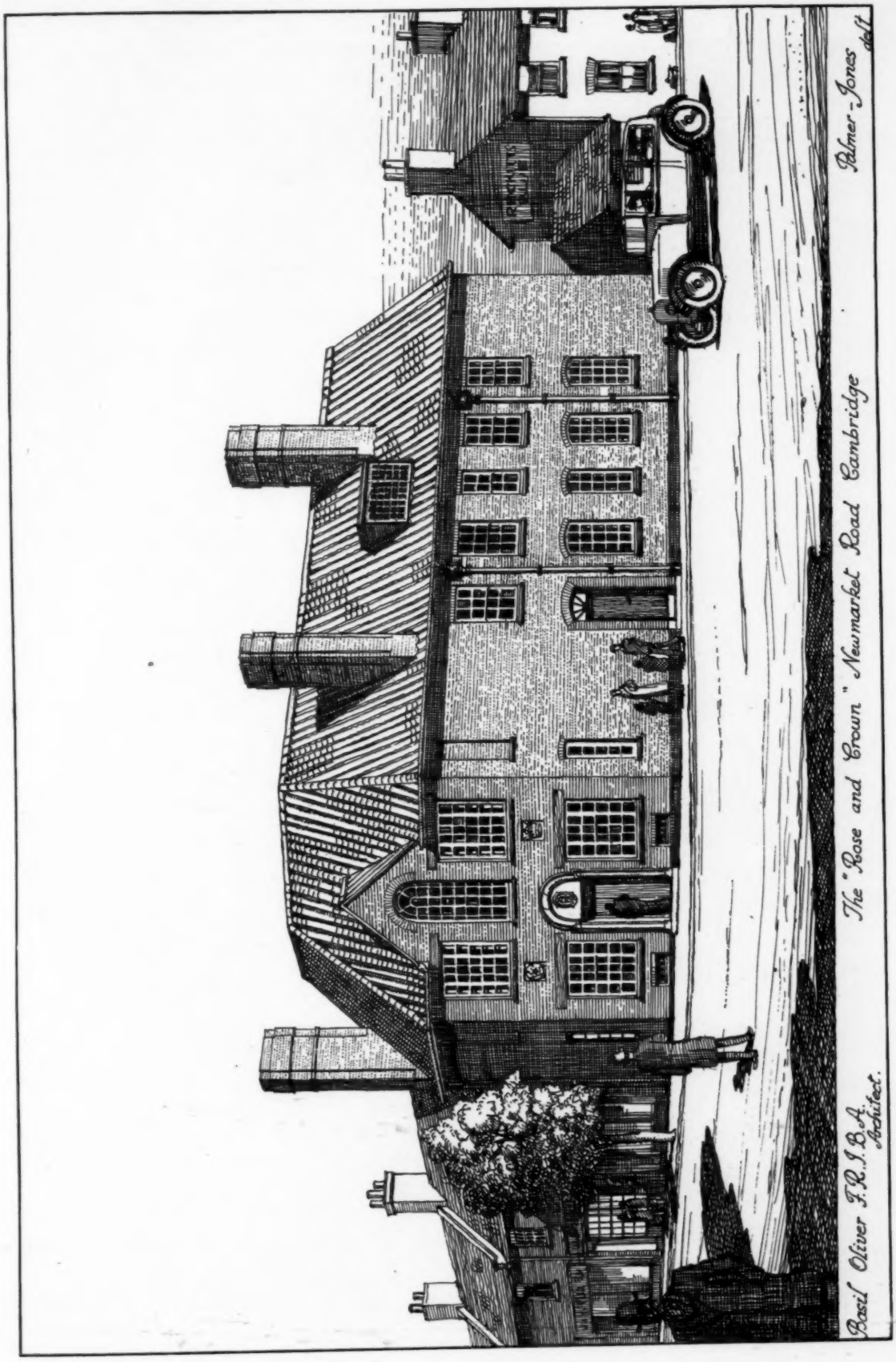

Basil Oliver F.R.I.B.A. Architect. The "Rose and Crown" Newmarket Road Cambridge Palmer-Jones del.

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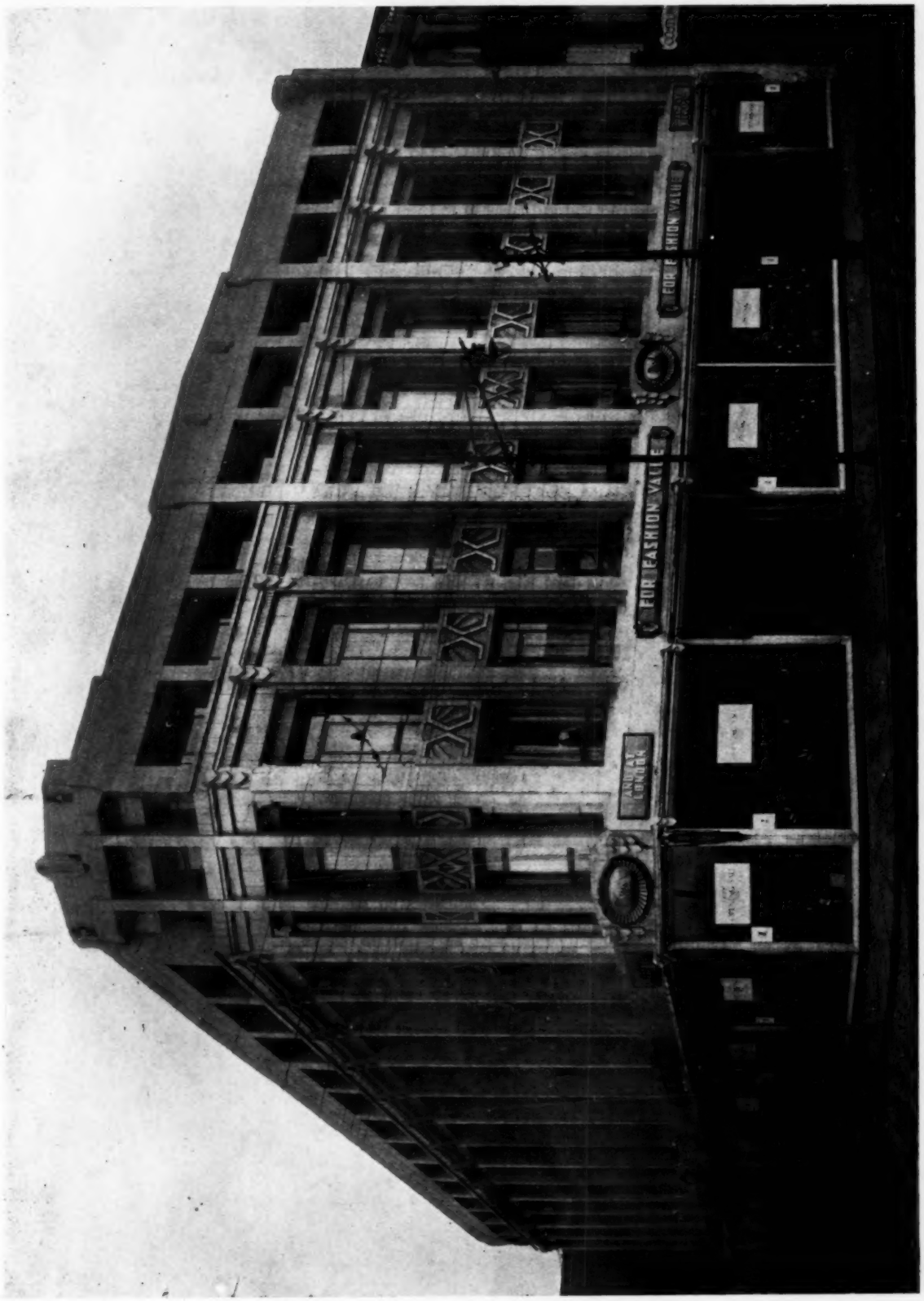

New Store Building, Manchester. MESSRS. NORTH, ROBIN, & WILSDON, Architects.

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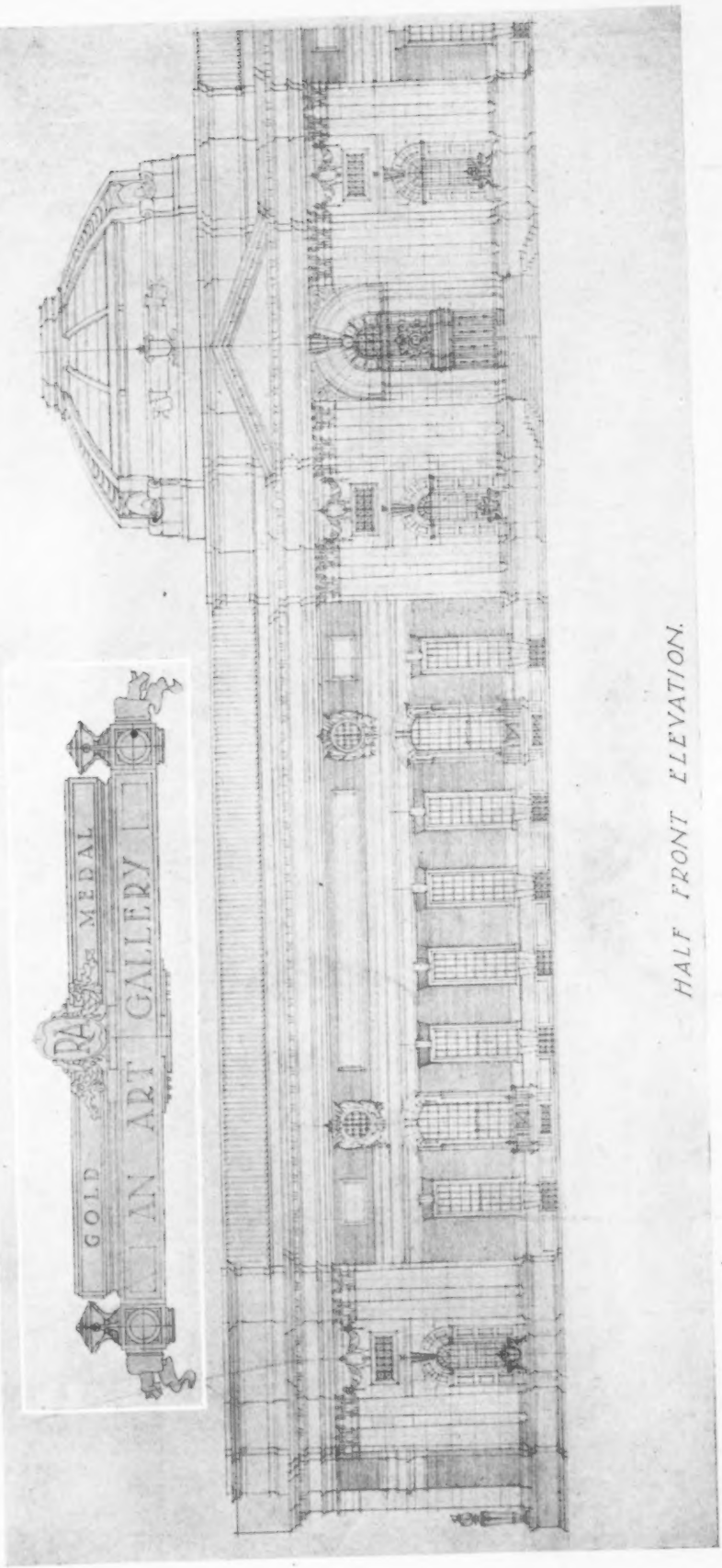

Design for an Art Gallery.
By MR. R. G. ROEPIDNICK.

R.A. Gold Medal and Edward Stott Travelling Studentship.

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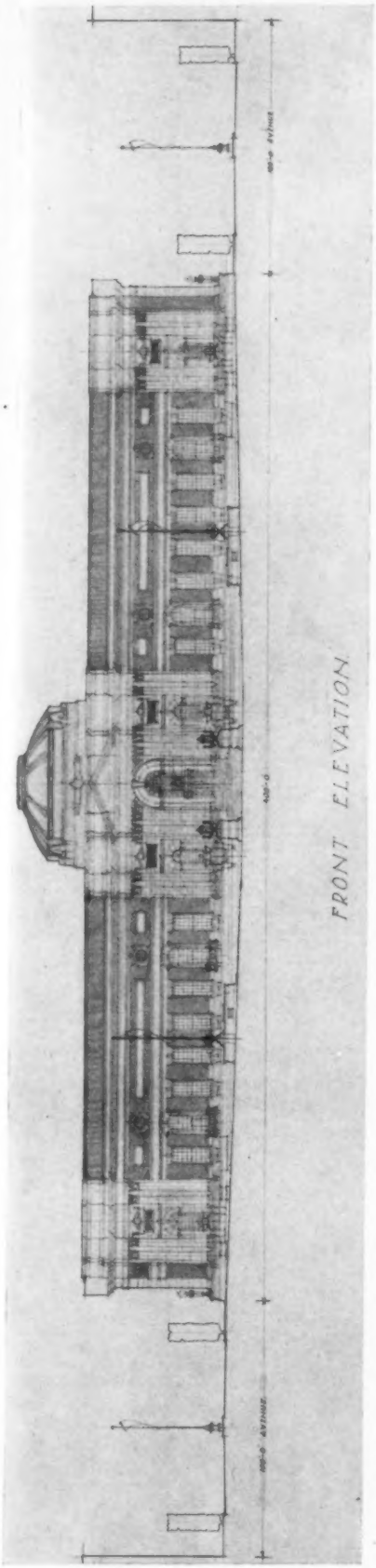

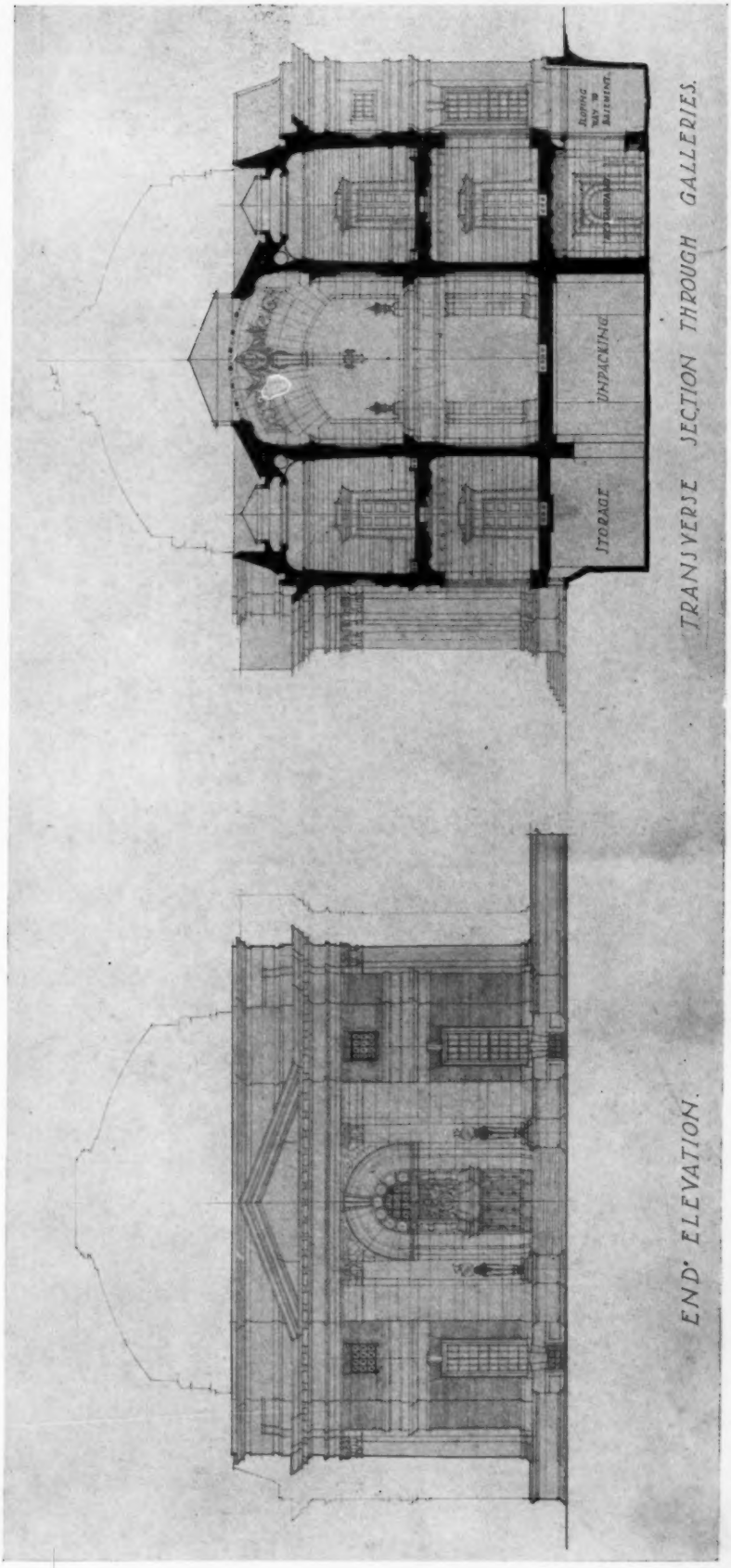

Design for an Art Gallery. By Mr. R. G. BOSTEDNICK.

R.A. Gold Medal and Edward Stott Travelling Studentship.

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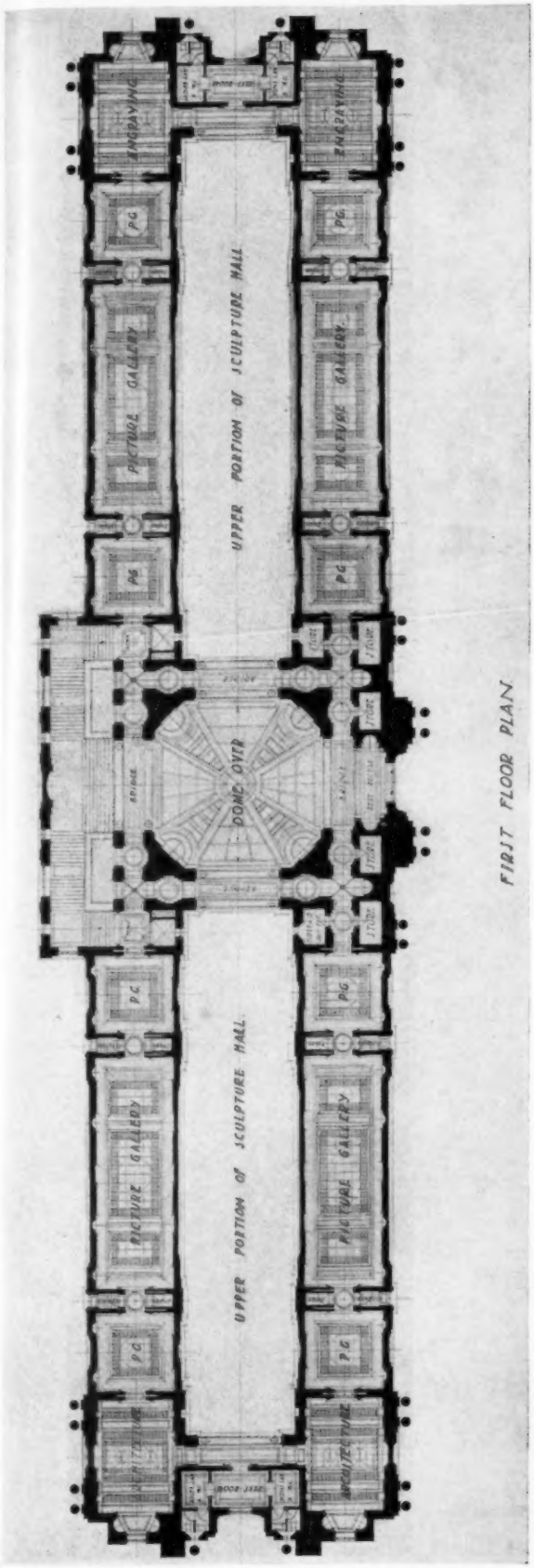

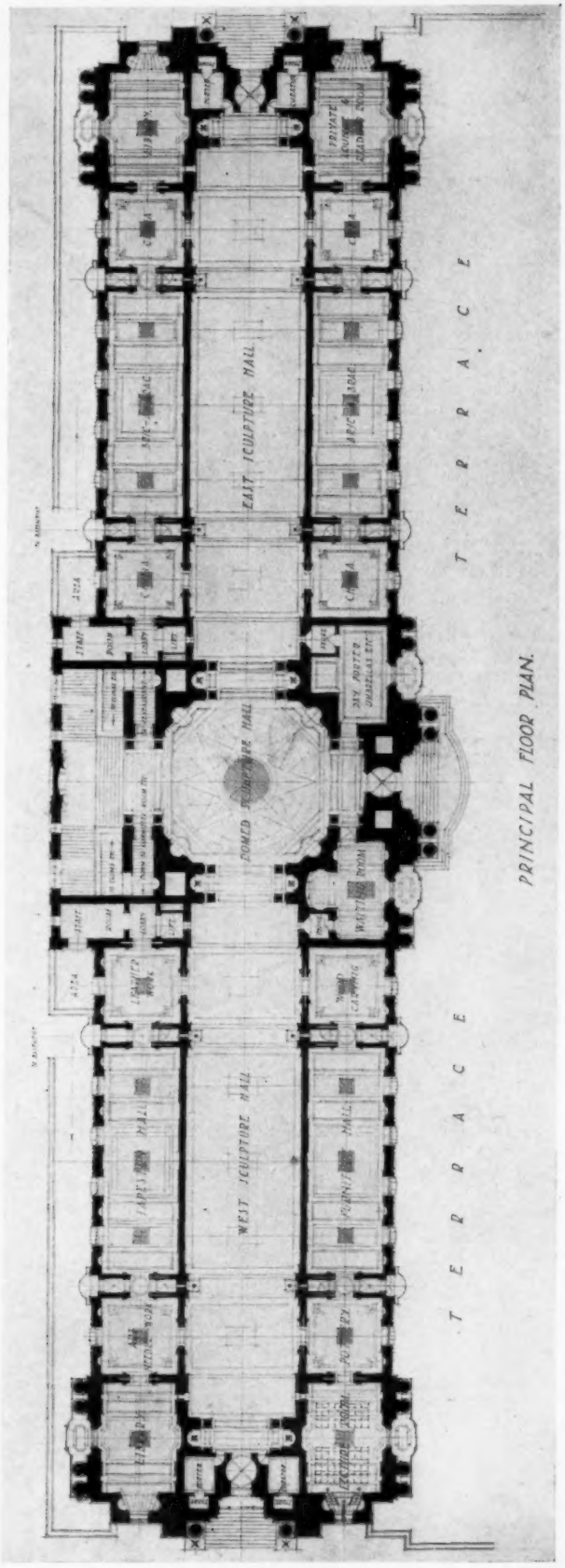

Design for an Art Gallery. By Mr. R. G. Bosdiston.

R.A. Gold Medal and Edward Stott Travelling Studentship.

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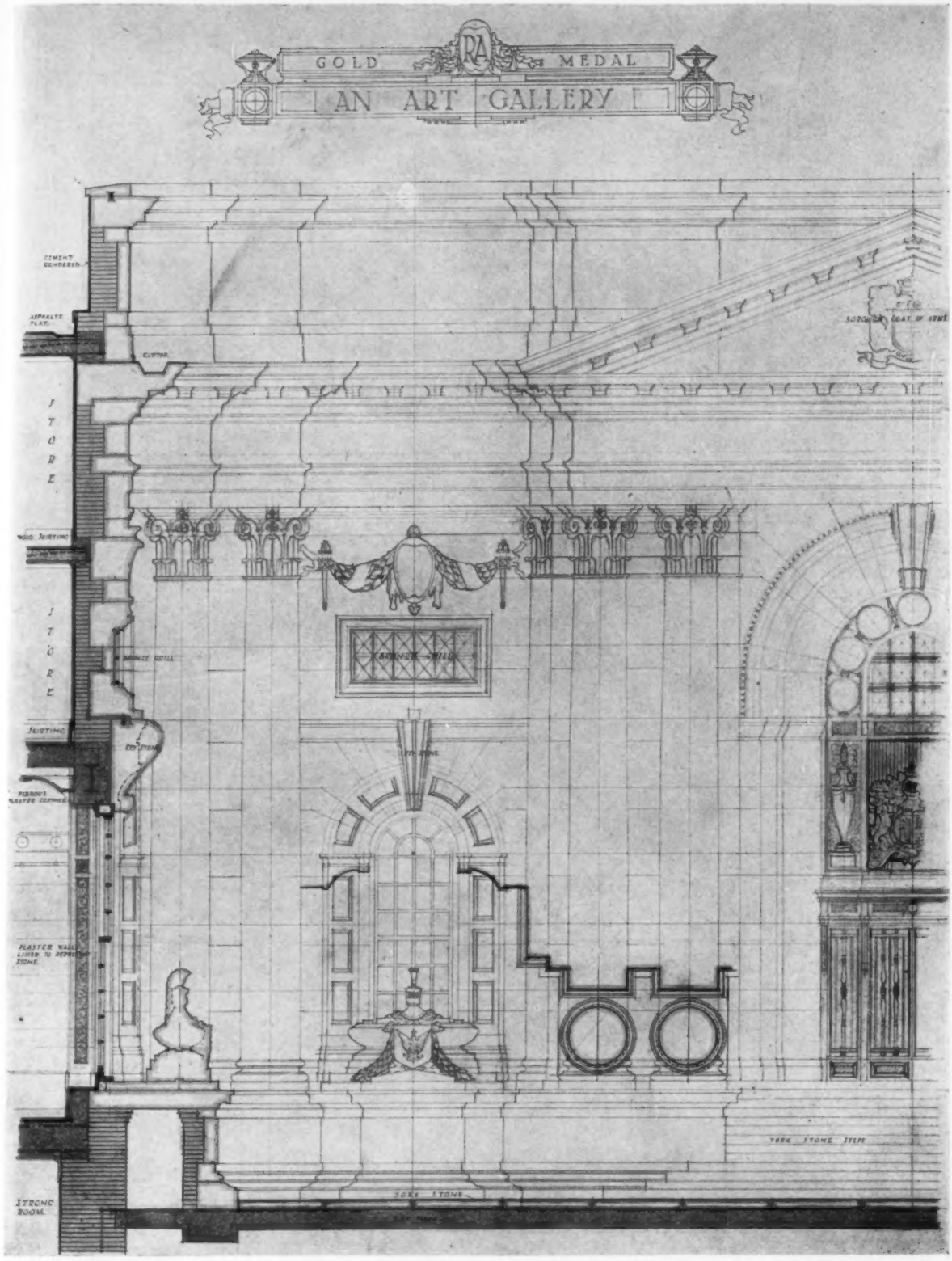
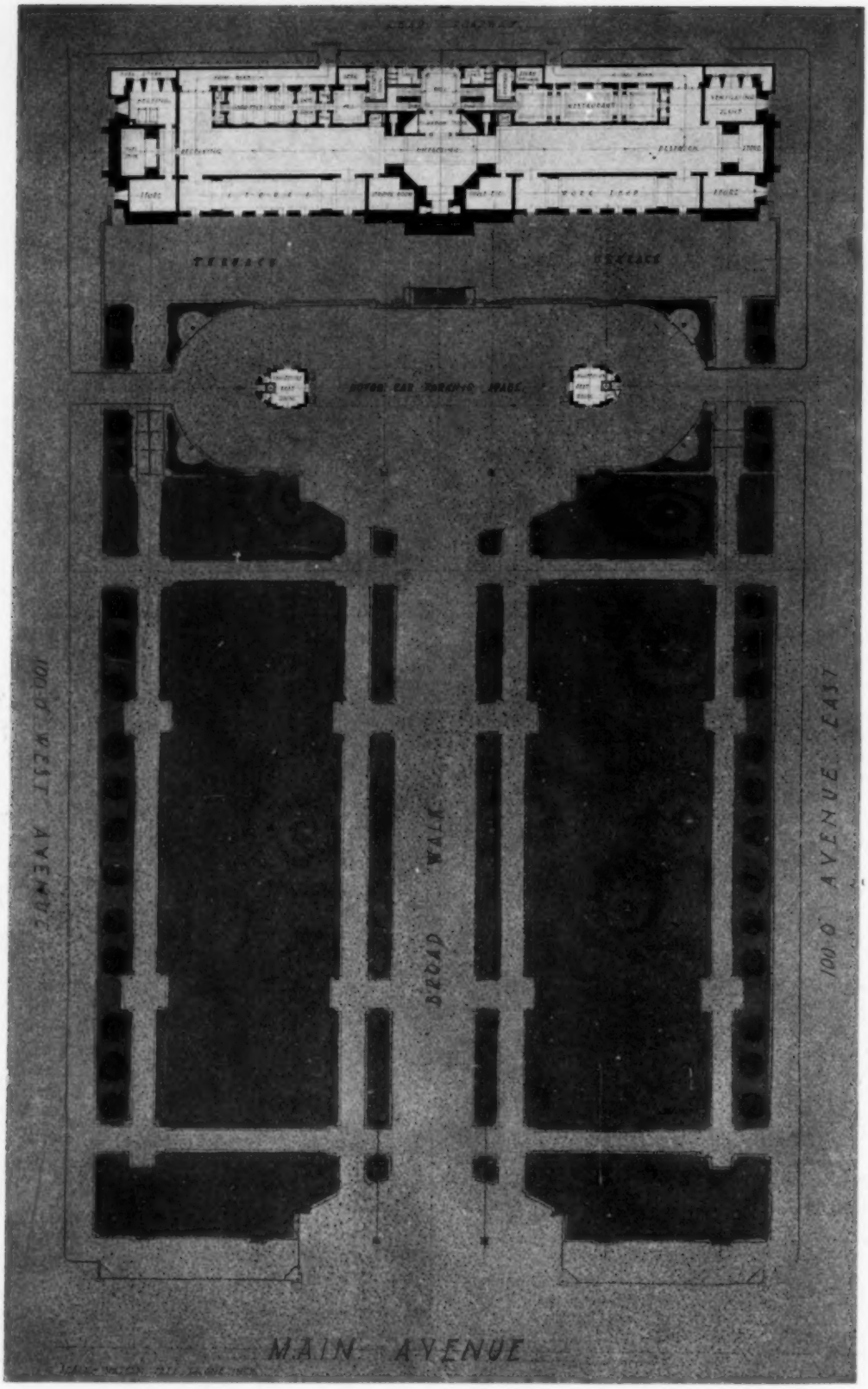


R.A. Gold Medal and Edward Stott Travelling Studentship.

Design for an Art Gallery.

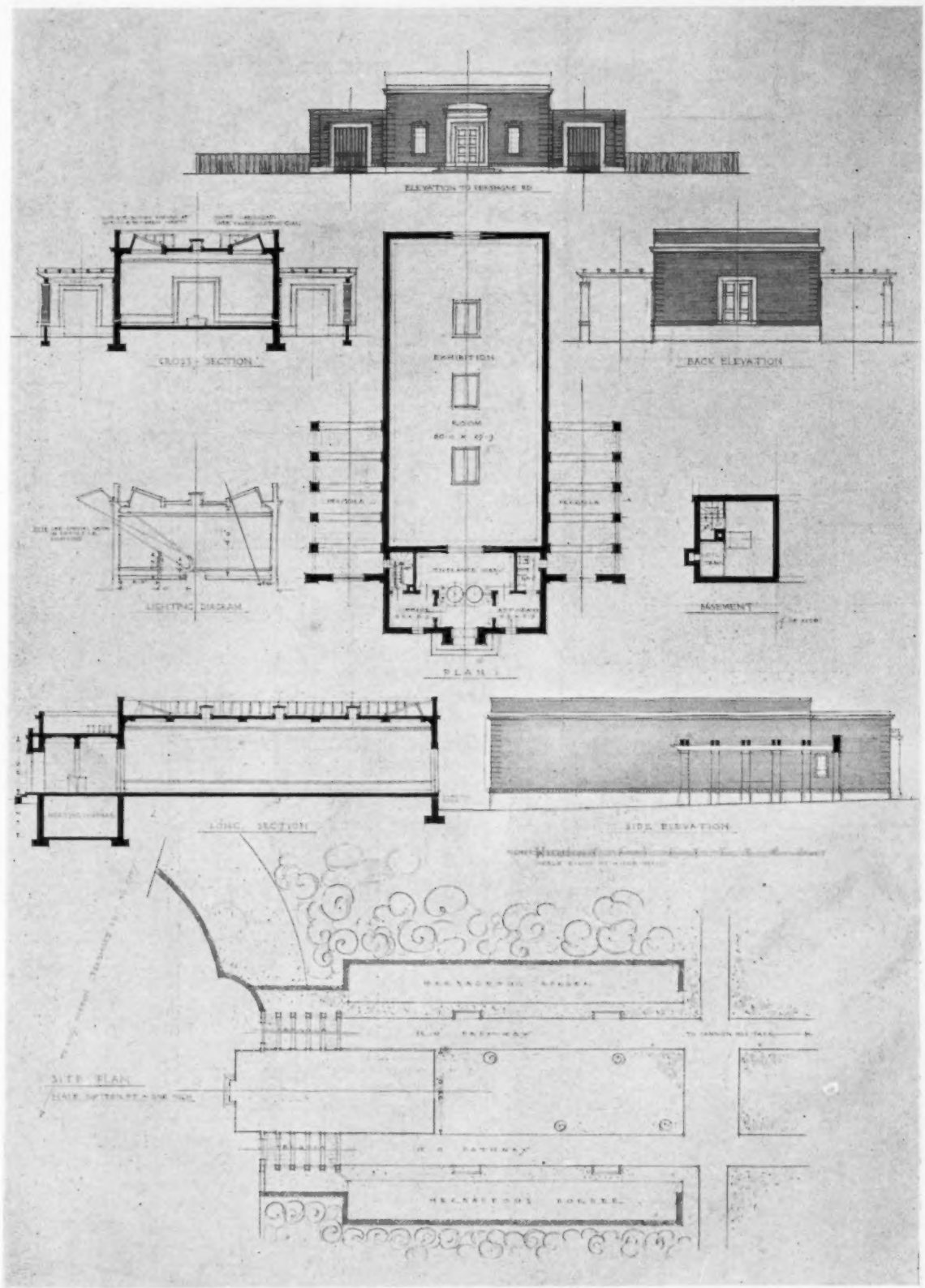
By MR. R. G. BOSPIDNICK.



R.A. Gold Medal and Edward Stott Travelling Studentship.

Design for an Art Gallery.

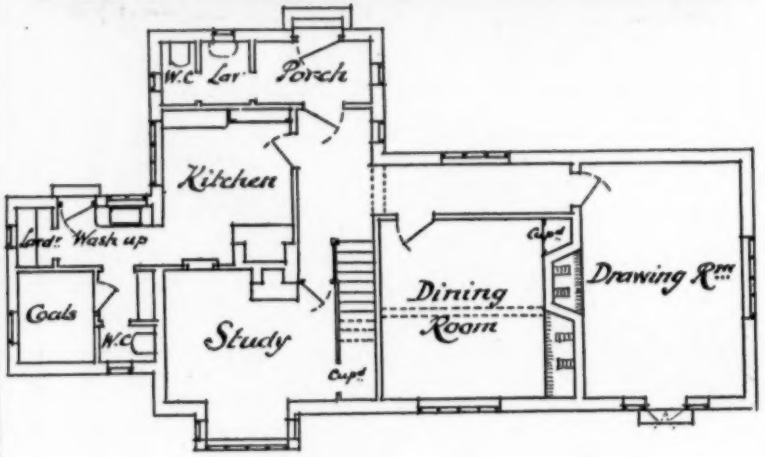
By MR. R. G. BOSPIDNICK.



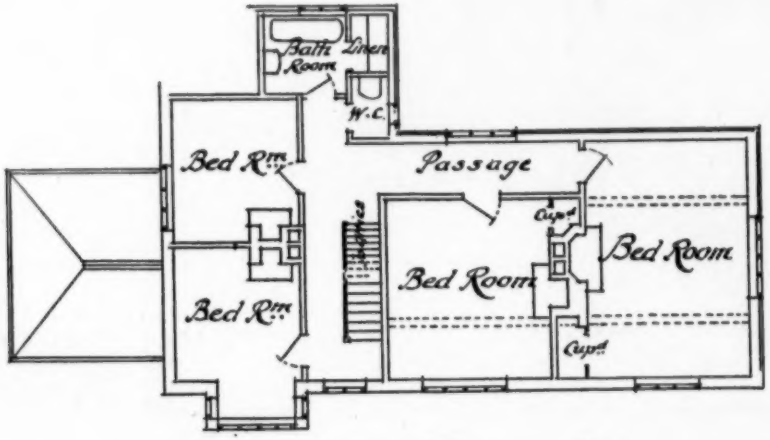
Branch Art Gallery Competition, Cannon Hill Park, Birmingham: Second Premiated Design.

By MESSRS. D. G. WALTON, A.R.I.B.A., and T. WYNNE THOMAS.

Entrance Elevation



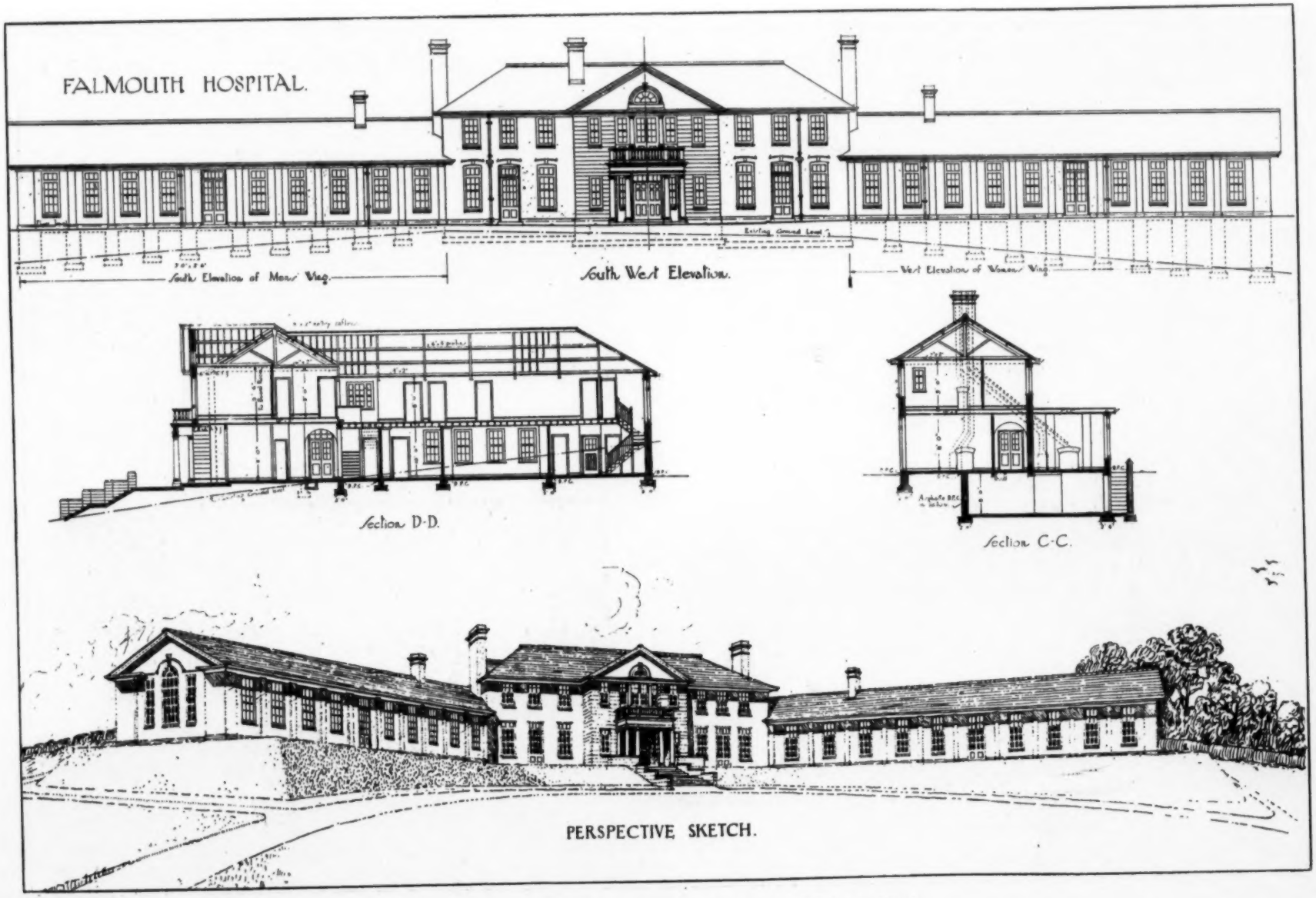
Ground Floor Plan



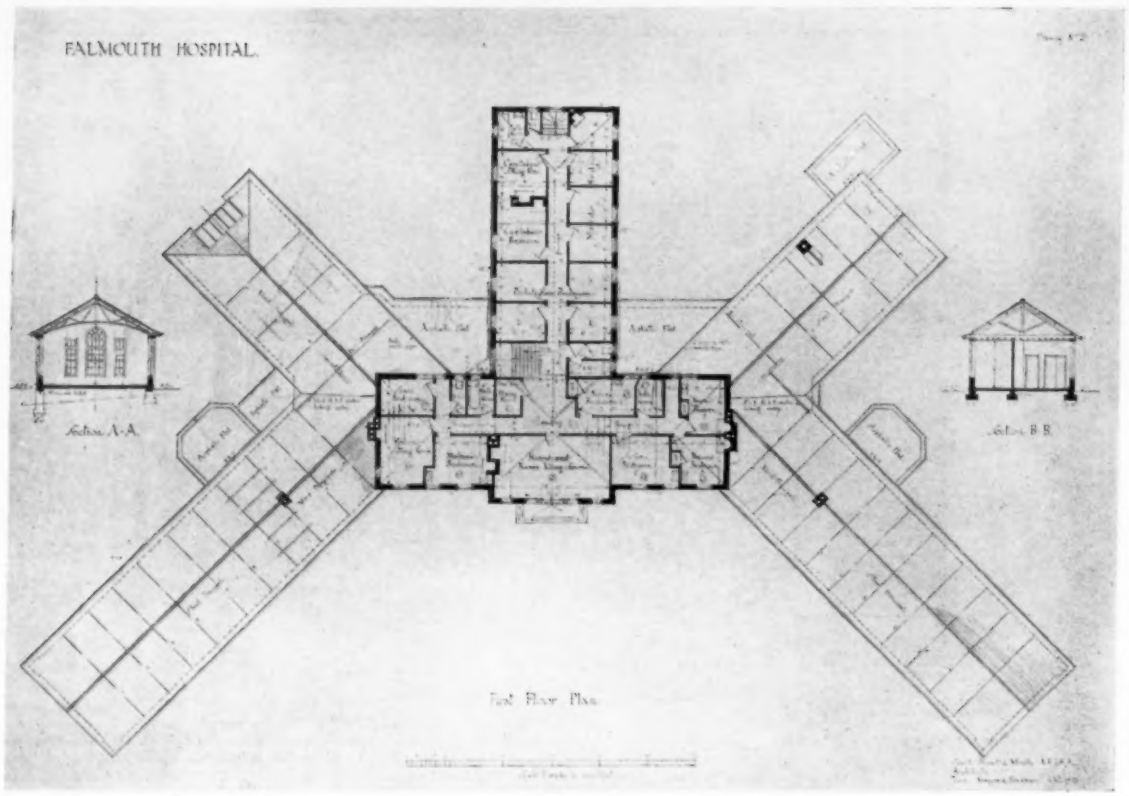
First Floor Plan

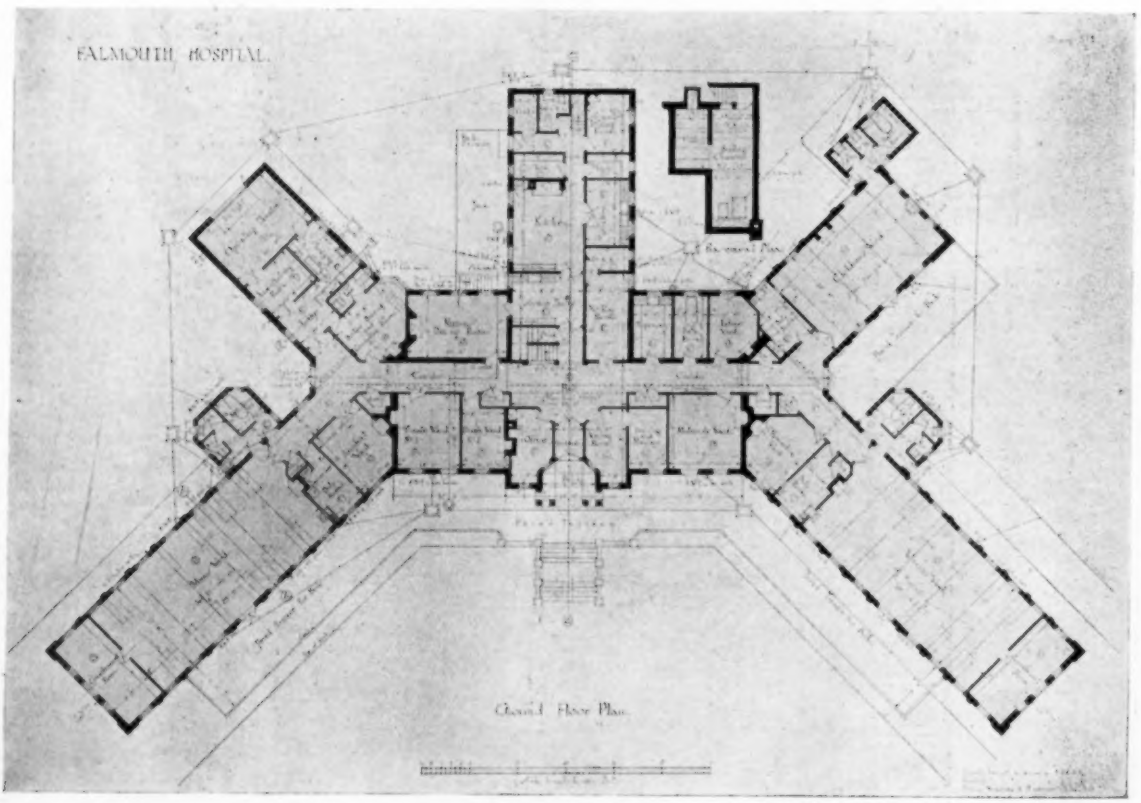
COBHAM : EDENBRIDGE : KENT :

Arthur Keen F.R.I.B.A.
Grays Inn London.



MESSRS. COWELL, DREWITT & WHEATLEY, LL. and A.R.I.B.A., Architects.





Falmouth Hospital.

MESSRS. COWELL, DREWITT & WHEATLEY, LL. and A.R.I.B.A., Architects.

REALISM*

IN "Modern Architecture" Mr. Bruno Taut describes the principles and the development of what he calls a new movement. A school of architects known as modernists find it difficult to reconcile the technical progress made by motor-cars, ships, and aeroplanes, with the shapes assumed by houses, furniture, and general objects of daily use. It is difficult to ascertain whether this new movement is the new art of construction, or whether the sole desire is to make everything as practical as possible and to make beauty dependent upon practical values. "The first and foremost point at issue in any building should be how to attain the uttermost utility"; and again, "Beauty originates from the direct relationship between building and purpose, from the natural qualities of the material and from elegance of construction." These are two, amongst others, of the author's axioms that we have not torn from their context. They lead to the simple thesis of the new æsthetic: "The aim of architecture is creation of the perfect, and therefore also beautiful, efficiency." To us there appears the obvious pitfall, that everything must be different on principle if it has been done beautifully before. Diamond-paned windows and steep thatched roofs to the house of a modern business man may seem to be an anachronism to the author, believing, as he does, that nothing in olden times was built according to modern conventional æstheticism merely for the sake of constructing something beautiful. Houses, he would say, were only built for strictly utilitarian purposes which determined the basis of style and character from the beginning. No doubt their designers were not thinking of beauty, which came in by itself like virtue, but we are inclined to make a distinction between the simple things made by people free from self-consciousness, and the self-conscious simple things made by people who are really complicated in mind. A great deal hangs upon the statement: "We simply do not believe that anything can look unsightly and yet function well." A metaphysician might agree with this, but we know to our sorrow that the converse is true.

As we gather it, the author does not agree that anything is architectural if it does more than meet the bare utility. For this reason he criticises the illustration of a certain building because it is inclined to be didactic and therefore not strictly architectural. Good architecture has been achieved in American silo buildings "without their creators either knowing or creating it," whereas bad architecture has been the result when opportunities were given for representational treatment. It is a depressing thought. Similarly, Adelaide House "might just pass muster"; the building is almost good "where architecture was not consciously intended."

It remains, therefore, for readers to analyse for themselves the numerous excellent photographs. A very wide range of buildings in France, Germany, Holland, Switzerland, and England is shown, and judging by our old-fashioned standards we infinitely prefer the old masterpieces. Unfortunately, as no plans are given, we are unable to criticise the designs upon the fundamental principles laid down by the author. There is no doubt that many purely industrial buildings have been invested in these illustrations with an amount of frankness that adds a certain amount of grace and dignity where we have been accustomed far too often to ugliness. On the other hand, many of the illustrations of houses create the impression that the appearance of simplicity, or even plainness, is not quite so spontaneous as the designers would have us believe. There is a feeling of deliberate designing—where the author would deny any attempt at architectural design—and there appears the tendency towards artificial stylistic forms just as arbitrary as the older derided forms.

Whether this new movement will have the future which the author expects or not, his point of view is well presented. It remains to be said that the whole book is beautifully produced, and it undoubtedly fulfils the publisher's claim to be a standard guide to the subject.

Miss Todd's and Mr. Mortimer's book makes a valuable companion to "Modern Architecture." We get the same contention—that a twentieth-century style exists, and the same conclusions—that we may live in a period house, eat at a period table, and sleep in a period bed, but we cannot live period lives. The truth of this we cannot doubt, and in facing the fact that we live in this age lies the authors' opportunity to show what ought to be done. From this we proceed to the theory of rationalism:—"The more closely the form of an object fits its use, the more economical will be its manufacture, and at the same time the less likely it is to be ugly." These are familiar generalisations that do not convey the whole truth. We are to believe that it is in skyscrapers that the age finds its true expression; that the best inspiration for the architect is to be found in the streamline of an automobile, or the scientific curves of a liner; and finally, that the architect must be an engineer before he is an artist. None of these things do we believe.

To the authors, M. le Corbusier is the most striking genius of contemporary architecture. He advocates the extreme of simplicity, and delights in the beauty of function. No attempt is made to mask gas or water pipes; in fact, the habit of concealing anything is naturally abhorrent to this school. A theory of function is merged into a theory of ethics, so that any concealment of function is a form of humbug. Consequently we are to accept the heating apparatus with the funnel and pipes in the main hall as "characteristic of an exploitation of the beauty of function." Taps, basins, and lead traps, we are told, may look well in an appropriate place; therefore we are referred with evident pride to an illustration of a basin in an entrance hall. With the author's comments upon steel houses we are in complete agreement; they were not unlike enough to other houses. At the same time it ought to have been stated that the genesis of the steel house was solely the abnormal economic situation.

The whole point, it seems to us, in a book of this nature is simply whether we can adjust our conception of beauty to appreciate the enthusiasm of the authors for their twentieth-century style. Failure on our part undoubtedly lays us open to the charge that all our old-fashioned objective definitions of beauty are wrong and require adjusting. In the mass of material collected in this book we have been unable to detect a strain which, we honestly believe, could form the basis of a new tradition upon definite principles. It may easily develop into a stylistic movement—a result that the authors would probably regard as disappointing. Time alone—or is it common-sense?—will settle the matter.

The series of illustrations is well chosen and beautifully reproduced, and represents, of its kind, quite the best collection that has appeared in England.

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*"Modern Architecture," by Bruno Taut. The Studio. 30s. net.

"The New Interior Decoration," by Dorothy Todd and Raymond Mortimer. B. T. Batsford. 21s. net.

The Abbey Sacristy.

It is understood that the committee which was set up by the Dean and Chapter of Westminster to examine the proposals for a new Sacristy at Westminster Abbey assembled on Wednesday for its final meeting, and that it is hoped its report will be in the hands of the Dean and Chapter before Christmas.

ARCHITECTS AND PUBLIC BUILDINGS

IN the course of a letter on the subject of the Calton Crag Site, addressed to the Lord Provost T. B. Whitson, of Edinburgh, on behalf of the St. Andrew Society, the National Council of Women (Edinburgh Branch), the Cockburn Association, the Edinburgh Women Citizens' Association, the Royal Incorporation of Architects in Scotland, the Society of Scottish Artists, and the Greater Edinburgh Club, the secretary of the Royal Incorporation of Architects is Scotland writes:—

"Following a letter from Mr. George Mathers, M.P., which appeared in the public Press, a number of societies, representative of Scottish opinion, approached the First Commissioner, asking to be allowed to submit on his visit to Edinburgh their considered views on the subject. Mr. Lansbury has declined to meet or hear these deputations. The societies cannot emphasise strongly enough the feeling existing, not only throughout Edinburgh, but throughout Scotland, that the buildings to be erected on above unique site should not be designed merely to accommodate Government branch offices and a court house. It is felt that, without a competition open to all architects in Britain, the opportunity will be lost of making said buildings representative, within and without, of their importance as the centre of Scottish government, and worthy of the architectural traditions of the city of Edinburgh. As you are aware, both the public Press and the general public wholly endorse the views and wishes of the Town Council, as recently expressed in the Town Council's vote for open competition, that the site is indeed deserving of the finest architectural treatment available."

In a letter to the Edinburgh *Evening Dispatch*, Mr. William Davidson writes as follows:—

"The position in relation to the Calton site is becoming rather complicated. The Town Council voted for an open competition by 41 votes to 12 against. Their adviser is the City Architect. The Royal Scottish Academy as a body have voted for an open competition. The President of the Royal Scottish Academy is the only architectural representative on the Fine Art Commission. Here we have the only two bodies which stand between the citizens and the Office of Works expressing through their professional representatives an overwhelming majority for an open competition. In these circumstances, it seems Gilbertian that they should even examine the plans and models which are to be brought to Edinburgh by Mr. Lansbury and Sir Lionel Earle on Monday.

"The following facts may help the public to realise the position of the profession in regard to the design of public buildings. In a letter to the *Times*, dated June 29, Sir A. Brumwell Thomas gave the following figures as the official building programme of the Office of Works for the present year:—'The building programme of the Office of Works for the present year is officially stated to include altogether nearly 400 public buildings—law courts, administrative offices, laboratories, museums, an extension of the National Portrait Gallery, 56 new employment exchanges, 300 post offices and telephone exchanges, the Rampton State Institution, costing nearly £250,000; a training centre for the Air Ministry, and fourteen new diplomatic and Consular buildings abroad, including a large Embassy scheme at Tokio.'

"In view of Sir Lionel Earle's statement before the Select Committee of Public Accounts at the House of Commons in February last that 'really important buildings' were given to outside architects, the above list is a somewhat staggering one."

Mr. F. C. Mears writes to the *Scotsman* as follows:— December 14, 1929.

"The buildings to be erected on the Calton Crag should be regarded as enshrining some-

thing more than healthy and convenient accommodation for branch departments, for they are intended to serve as headquarters for the Government in Scotland. They should not, therefore, be conceived and planned merely as a series of offices, however carefully decorated as regards their exterior. Modern office buildings are designed, for structural and economic reasons, on a regular unit system of windows and intervening walls and floors, so calculated that one unit serves for typists' rooms or cloakrooms, two units for small offices, and three, four or more for large offices or committee rooms. Thus the basic design of an exterior wall of such a building may be likened to a rigid gridiron, and the architectural effect produced will be that of the west barrack on the Castle Rock. Any attempt to modify the monotonous effect by means of arbitrary projections or architectural trimmings can only lead to unsatisfactory results, as these additions do not rise directly from plan and construction.

"If, on the other hand, the new buildings are conceived with some imaginative force, as being national in character, these severely designed office blocks will be subordinated to, and contrast with, a central portion, in which are the secretary's offices and suites of conference rooms, set in relation to a large entrance hall and stairway designed to give opportunity for appropriate wall paintings and sculpture. This arrangement will find normal expression on the exterior, and the whole design will be transformed. Here the architect proves his ability, for such a design arises as the result of a flash of inspiration, actually momentary in character, embracing all the technical conditions, but transforming them. It is in this sense that officials must fail to produce a noble building."

Mr. A. Nicol Bruce, in the course of a letter to the *Scotsman*, writes as follows :—

"It is interesting to note that the following buildings of national importance were all designed by architects in private practice :—St. George's Hall, Liverpool (Elmes); Town Hall, Manchester (Vincent Harris); Town Hall, Leeds (C. Broderick); Liverpool Cathedral (Sir G. G. Scott); National Museum of Wales (Smith and Brewer); National Library of Wales (Greenslade); Port of London Buildings (Sir E. Cooper). All of these were won in competition, in many cases by relatively young men. To these may be added :—Leeds University (Lanchester and Lodge); Cardiff Law Courts and Central Wesleyan Hall, Westminster (Lanchester and Rickards); British Museum Extension Buildings (Sir John Burnet); Australian Commonwealth Buildings (Marshall Mackenzie); British Embassy, Washington (Sir Edwin Lutyens); Government Buildings, New Delhi (Sir Herbert Baker and Sir Edwin Lutyens); Bristol University (Oakley and Lawrence); New Underground Railway Buildings (Adams and Holden); Masonic Temple, Manchester (Worthington and Sons); Southampton Town Hall (Berry Webber). These buildings are all designed by private architects. One need not refer to our wonderful Scottish War Memorial. . . .

"It is common knowledge that architecture in Europe to-day is slowly evolving a style which, though based on tradition, is in its essentials entirely fresh and new. It would be little short of a calamity if the British Government refused to allow free scope, by means of public competition open to British architects, to contribute their quota to the progress of architectural design. It is not only the accepted, but presumably the best, design which is of importance. The other competitive designs are usually available for examination, and the comparison of the leading architects' conceptions by the facilities thus afforded are of immense value."

Mr. G. C. Lawrence, writing to *The Times*, says :—

"The problem presented by the growth of official architecture is difficult only because that growth is based upon widespread misunderstanding of the function of an architect. The public, particularly as represented by public authorities, seems to see no farther than a mere literal interpretation of the word 'architect' as standing for 'chief-builder,' blind to the fact that, as such, his essential function is that of an inventor, whose job it is to invent and re-invent, according to the ever-changing dictates of necessity. The simple fact is that it is as contrary to the public interest to restrict the invention of buildings to a limited group of official architects as it would be to limit invention, generally, to the output of State-appointed inventors, a fact which Parliament obviously had in mind when it recently refused to protect the word 'architect' from the incursions of 'unqualified' genius.

"It is not alleged by the opponents of the official architectural system that official architects are lacking in individual inventiveness. The force of the opposition lies in the uneconomic and anti-social folly of imposing restriction upon a natural and practically unlimited supply of productive inventive capacity; for such artificial restriction must ultimately result in drought and sterility. There would have been little inconvenience attaching to last summer's drought in this country had it not been that, of the total volume of antecedent rainfall, a vast proportion had been permitted to run to waste."

Mr. George Lansbury, M.P., First Commissioner of Works, received a joint deputation in Edinburgh last Monday from the Town Council and the Sheriff Court-House Commissioners on the subject of the Government buildings projected for the Calton Jail site. The design and elevation, he explained, would have to go to the Fine Art Commission for Scotland for consideration, and he hoped they would be in a position to do this in some six weeks time, and thereafter the plans and elevation would be submitted to the Corporation of Edinburgh. He hoped there would be no question of going to arbitration, and that the design as submitted by Sir Richard Allison, chief architect of the Office of Works, would be recognised by all as being a building worthy of the site. Speaking for himself, he said he would not dream of proceeding in the face of really serious opposition, if the objections raised to the scheme appeared to him to be of sufficient weight as to justify reconsidering the position.

SOCIETIES AND INSTITUTIONS

THE CORINTHIAN ORDER OF THE GREEKS.

Sir Banister Fletcher, P.R.I.B.A., on Wednesday, December 11, gave a lecture at the Central School of Arts and Crafts on the origin and use of the Corinthian Order, which, he said, was Greek by birth and Roman by adoption. The Greek love of the beautiful and their gift for developing art-forms tempted them to introduce that more varied and ornate combination of nature-forms which became known as Corinthian, thus completing the three orders of architecture known to the Greeks. Whereas Doric and Ionic were both tribal names, Corinthian bore no such meaning. Some of these early Corinthian capitals were in bronze, a metal worked in Corinth by a certain Callimachus, and thus known as Corinthian bronze—much as we called a certain product "Sheffield plate"—so the material might have given the name to the style. As to origin, it was hardly likely that the new order was suggested by the anthemion necking of the Ionic capitals of the Erechtheion, because that did not account for the altered shape and increased height. It was more probable that Greek artist-craftsmen, who ever sought some new thing, seized upon the Egyptian lotus and papyrus prototypes at Karnak and Philæ and from them reproduced the bell-shaped capital, sheathed in tiers of carved acanthus leaves and curling calices. Greek imagination was strong enough to create the order, but Greek love of simplicity was stronger, and the order was little used by this classic people, except in small buildings, like the Choragic Monument of Lysicrates and the Athenian Astronomer's "Tower of the Winds." Later on, however, the Corinthian order made a stronger appeal to the Romans, who were then making use of beautiful forms in building to emphasise their imperial power.

THE COLLEGE OF ESTATE MANAGEMENT.

Lecturing at the College of Estate Management, Lincoln's Inn Fields, on December 3, Mr. Graham Mould, Barrister-at-Law, dealt with tenants' compensation under the Landlord and Tenant Act, 1927, which he described as an earnest effort at fairness as between the two parties and to prevent the injustice from which sometimes the tenant suffered when he had previously effected improvements and was deprived of all the fruit of them. He advised students of this Act to give attention to the time-table. If the times were not punctiliously observed, a perfectly good claim might be ruled out. It was very important to note the time in relation to the end of the tenancy during which claims must be made. The tenant could not make any improvement he wanted and expect to claim on it. It was a frequent experience that the most prized possessions of the old tenant were merely dust and ashes in the eyes of those to whom the property reverted. The tenant had to give notice of his intention of making an improvement, and if the landlord and tenant could not agree as to its character they could go before a tribunal which would certify whether the improvement was good or not. The chief points to which the tribunal would pay attention were whether the improvement would add to the letting value, and whether it was reasonable and in accord with the character of the premises.

Speaking of compensation for goodwill, the lecturer pointed out that any goodwill which was attributable exclusively to the situation of the premises must be disregarded by the tribunal. There was a great difference from this point of view between a "connection business" and a "chance business." A tenant might be granted a new lease in lieu of compensation, but he could only claim a new lease where first of all he had established his claim to compensation for goodwill.

CHADWICK PUBLIC LECTURE.

In the course of a Chadwick public lecture on "Public Health Law and Administration Introduced by the Local Government Act, 1929," given on Tuesday, December 3, in the Inner Temple Hall (Sir William J. Collins, K.C.V.O., in the chair), Mr. William A. Robson, Ph.D., Barrister-at-Law, said the Local Government Act, 1929, was introduced primarily as a financial measure, intended to relieve the burden of rates on industry. It was clear, however, that the public health aspects of the Act were of the greatest importance, although many of them did not receive adequate attention at the time when the Bill was passing through Parliament. The abolition of the boards of guardians and the transfer of their functions to the general local authorities was accompanied by a provision which enabled county and county borough councils to provide assistance under a number of social service statutes in place of relief under the poor law. Where this was taken advantage of as regards sick persons, the great poor law hospitals and infirmaries would be transformed into municipal general hospitals provided under the Public Health Acts for the use of the whole body of citi-

zens. Thus, almost by a side-wind, the whole hospital question would be radically changed both as regards law and administration. At the same time, the Act provided for a survey of the existing provision of infectious disease hospitals, and stringent means were taken to compel the formulation and carrying out of schemes to secure "adequate hospital accommodation" for infectious disease.

This lecture concluded the seventeenth annual series of Chadwick Public Lectures. The eighteenth series will begin in February, 1930. Particulars of the spring programme may be obtained from the Secretary, Mrs. Aubrey Richardson, O.B.E., at the Offices of the Trust, 204, Abbey House, Westminster.

WEST YORKSHIRE SOCIETY OF ARCHITECTS.

A large attendance of members of this Society was presided over by Mr. G. H. Foggitt at a meeting held on December 5, at the Hotel Metropole, Leeds, the occasion being a demonstration (under the auspices of Messrs. G. & T. Earle, Ltd.) of the possible textural finishes that could be given to exterior cement facing, by Mr. A. Millard. The processes were described in a running commentary by Mr. G. McLean Gibson, A.M.Inst.C.E., who requested those present to note their preferences for any particular style of finish, as, at the conclusion, he wished to take a vote on the question. He remarked that a plasterer ordinarily prepared his rendering with a more or less vertical scratched key, with horizontal screeds; but the speaker found that horizontal scratching and vertical screeds, with the float worked from the bottom upward, was more effectual. About twenty various finishings were demonstrated by Mr. Millard, among them being: "Modern American," "Californian," "Moorish," "English Cottage," "Mexican," "Green Back," and "French Brush." The exhibition was of an instructive character and greatly interested those present.

Mr. H. Chippindale, in moving the vote of thanks, said that although admiring several of the textural effects shown, he rather doubted the fastness of some of the colouring matter if used adjacent to such cities as Leeds and Bradford.

Mr. F. Mitchell, in seconding, testified to the value to architects of such novel and practical demonstrations as they had witnessed, and hoped that others of a similar nature might be arranged in the future.

Mr. G. H. Foggitt welcomed Messrs. Earle's offer to arrange classes, under the Society's auspices, for operative plasterers to gain a knowledge of the various styles of finish to which exterior cement work was susceptible, and he would certainly see what could be done in that direction.

At the conclusion, on a vote being taken, the style of finish under the title of "English Cottage" found most favour among the members present.

WEST ESSEX ARCHITECTS.

A meeting of the West Essex Chapter of the Essex, Cambs, and Herts Society of Architects was held at the Old Chapter House, St. Paul's Churchyard, to do honour to the architects and staff who had been concerned during the last 17 years in the restoration of the dome of St. Paul's Cathedral, and to present a copy of the details of the work, signed by the five architects concerned, to the City Livery Club, where it will be open for inspection, upon application, to students of architecture. The presentation was made after an interesting speech by Sir Charles Nicholson. Major A. E. Watts, the ruling president of the City Livery Club, in accepting it, spoke of the happy association of the West Essex Chapter with the Club.

THE TOWN PLANNING INSTITUTE

MR. BARRY PARKER (President) took the chair at a meeting of the Institute, held at Caxton House, Westminster, on December 13, when Capt. W. E. James, who has been responsible for the engineering works at Welwyn Garden City, read a paper on "Engineering Aspects of Garden City Development."

Everyone, said the speaker, would agree that Letchworth and Welwyn should not long remain the only examples of garden city building in this country, and that efforts must be made to result in further new towns arising in the next few years, based upon similar principles, but variously, and, perhaps, more successfully applied. There had never, so far as he was aware, been any considered attempt to set down in detail the combination of physical characteristics which would make an area of open country peculiarly desirable as a site for a new town from the point of view of the effective and economical lay-out of engineering and sanitary services. It might be claimed that it was possible to effect a saving of £100,000 in the capital cost of the necessary development works, apart from large annual operating and maintenance charges, by a preliminary investigation in some detail of the suitability of alternative sites from engineering aspects.

The speaker devoted the first part of his paper to a sketch of the site characteristics which would provide ideal conditions for the main town services, and showed a map of a purely imaginary sketch of country which would give an exceptional opportunity for the sound and economical provision of the main engineering services for a town of about 50,000 inhabitants.

Having explained the principal advantages of this imaginary site, the speaker proceeded to deal with the steps necessary to be taken in the development of a garden city. The promoters of a new town would have secured the advice of experts of divers qualifications and points of view, but all possessed of a community sense and some experience of town planning. Though it was unlikely that they would have secured a perfect site, they would at least have found one free from obvious and serious defects, and it was, in the first instance, the engineer's task to ensure the best possible use of the ground. Much work must be done before it was wise to lay down even the earliest draft of a town plan. The first step was the contour survey, which when completed and plotted at vertical intervals of 5 ft. on the Ordnance Survey maps of the estate, gave at once the sense and value of the third dimension. At a later stage when the town centre was being fixed it would be wise to contour that area to vertical intervals of 1 ft. before finally deciding on it. While the contour survey was proceeding, all available geological records would be sought out and verified on the ground. Cuttings and excavations would be examined and the whole estate prospected for its mineral resources. It would be good economy to make hundreds of trial holes and bores in the attempt to secure an exact record of subsoil characteristics and of the position and extent of beds of building stone and deposits of brick-earth, gravel, sand, etc. The most important of all these operations was boring for water and testing for quality and yield until a pure and ample supply was found, if such existed, upon the estate or in its near neighbourhood. Adequate steps must then be taken to safeguard the supply from pollution for ever. Apart from his share in the planning of the town, the next practical work of the engineer was the lay-out of sidings and yards at suitable points for the off-loading of all the multifarious material that went to the building of a town, engineering plant, road materials, etc. It would be ultimately of great advantage if these sidings could at the outset be placed in the future industrial area even at the expense of longer hauls to some parts of the town during building operations.

On the background already provided the architect and the engineer in collaboration, watched over by a legal mind and a board of enlightened business men, assisted by many counsellors of various points of view, mostly useful and frequently valuable, set out to frame a plan for the town. The configuration of the site as revealed by the contoured map would probably at once and definitely determine the main drainage lines and indicate desirable routes for many of the roads required for heavier traffic to and from the town area. In such matters the architect would give way to the engineer, but in the location of the town centre and in the lines of its more formal lay-out the architect must take precedence, the engineer contributing practical criticism as required. In the development of the industrial zone he suggested an almost unfettered discretion for the engineer, particularly in the siting of industrial factories and in the details of access by road and rail. The design of sidings was a matter which should not be left in the hands of railway companies and incoming manufacturers who could not be expected to look so far ahead as should the engineer who believed in the future of the new town he was assisting into being. He suggested that the part of the architect in a factory area was to clothe with a semblance of order and beauty the villainous outlines of British industrialism, and he would, in passing, pay a tribute to his growing success in this urgent but unthankful task.

On the question of roads, the lecturer said that a road should always be straight in the absence of good and sufficient reasons for bending it. Where the conditions demanded a curved line, experience seemed to prove that an arc of a circle was more beautiful in perspective than an irregular curve, but there were frequent cases where the proportions of curves were dictated by "the lie of the land." Quite apart from the very important matter of levels there were always right places and wrong places for the siting of a bridge to cross a stream, and if necessary the town plan should be adjusted to enable the river bridges to be sited at the places dictated by the laws of river flow. Especially was this the case with a swiftly flowing stream. Railways would obviously be crossed if possible at points where they lay in deep cutting or on high embankment, and this would often be a determining factor in the layout of a new town. With regard to road junctions and crossings it would be generally agreed that the diagrams recently prepared by the Institute and published by the Minister of Transport were excellent and should be generally followed. But their use in garden cities must, it seemed, be restricted, because of cost, to the most important routes, and even there must be postponed until the volume of traffic compelled their adoption. Space could, however, be left available for the later development of road junctions and crossings on lines similar to those set out in the diagrams. Meanwhile zig-zag crossings for minor roads could well be introduced.

Experience in Welwyn Garden City had led him, said the speaker, to a strong advocacy of the system of grouping houses in squares and in closes off the main traffic routes, but also to the conviction that in most cases there should be provided a way through for foot traffic. Especially was this desirable in the case of the type of development which had in recent years become known as "housing schemes." With reference to road widths it appeared reasonable that the chief radial and ring roads even in a small town should have a width of at least 100 feet between building lines and not less than 50 feet between highway boundaries. The least initial width of carriageways in such roads was 18 feet, and ample verges should provide the possibility of widening to 30 feet in the future. Outlying

residential roads might be provided with carriageways 15 feet wide if all drive entrances upon them were sufficiently bell-mouthed. The least carriageway width in closes and cul-de-sac development appeared to be 13 feet, which proved just sufficient to allow to pass two vehicles driven at a moderate pace with reasonable care. Kerbing of all roads was essential if any attempt was to be made to maintain grass verges, and was, in any case, desirable as a support and a protection for the edges of the carriageway. Road making should be the last and not the first work in the detail development of a new town.

The quality of the water at the source of supply would have been considered from bacteriological and chemical aspects. A very important point to be borne in mind when designing waterworks for a new town today was that the water demand per head of the population would be relatively high. At Welwyn during the long dry summer of this year the average daily consumption per person was 57 gallons, including about 19 gallons for industrial purposes. The greatest consumption in one day was 77 gallons per head, including about 27 gallons for industrial purposes. The tendency towards increased use of water should be provided for by what might be regarded as excessively high tests of the yield of the prospective source of supply and by some increase from the beginning over the customary diameter of mains for pumping and distribution. It was comparatively easy to make additions to pumping plant and reservoir accommodation as necessity may dictate, but to double the water mains in the streets of a new town would be a grievous burden on the water undertaking and upon the community.

To avoid the heavy initial cost of sewers and sewage disposal works large enough to provide for the normal volume of foul water supplemented, at times of heavy rain, by a volume of surface water many times greater, a separate system of drainage should be adopted from the outset. Drains for the carriage of all water due to rain falling upon impervious surfaces, such as roofs, yards, carriageways and footways, should be concentrated at convenient points and carried to the natural watercourses by the routes indicated by the contour of the ground. Branch sewers for the passage of all foul water should follow the road lines, adopting as far as possible the general direction of falling ground, and joining the main sewer running to its outfall at the sewage disposal works. This would appear to be a perfectly simple matter, but it had initial difficulties which did not arise on the normal all-in system, and it added something to the cost of every building erected. Nevertheless it was to be strongly recommended. Experience appeared to indicate that in spite of the greatest care in the building of a town it was impossible to avoid injury to many of the old trees. Apparently this resulted from filling in ditches, and cutting off natural underground water channels by the laying of sewers and mains, and from the addition of impervious surfaces to roads and footways, rather than from direct damage to roots or bark. At Welwyn, ash trees had been the first to suffer, oak trees next, and elms least of all. Where it had been possible to plan open greens or gardens around them, the trees had survived. If trees were to be planted, the normal planting was in the verge between the carriageway and the footway, and this was probably the right place in residential roads where traffic was comparatively light. It was the quickest way of securing what might be termed an avenue effect. Its disadvantage was that, especially while the trees were young, the street lamps and danger signs were obscured by the lower branches. For roads to carry heavy traffic, unless they were of great width, the best position for trees seemed to be between the footway and the boundary. In shopping streets about the town centre, a sound rule would be that no tree should be planted in the paved footways. They should preferably be gathered in garden strips running down the centre of the streets or in groups placed at intervals entirely outside the street boundaries or at the ends of the streets. There was one particular danger which the garden city engineer must look for and if possible prevent. This was a tendency to plant clumps of bushes in the verges and at street corners where they obscured the sight line for traffic and made the roads dangerous for children. At Welwyn a happy solution of the open street corner difficulty had been reached by planting rose beds, which were exceedingly attractive throughout the summer and never grew thick enough or tall enough to block the view across the corner.

SIR THEODORE CHAMBERS said he had watched Capt. James during the last ten years carrying out the whole of the services that civilisation to-day required for a town which now had 9,000 inhabitants, but as a fact the author was covering the fundamental problems relative to a town of 100,000 inhabitants. He was more than ever convinced of the certainty of future garden cities, but some new method of finance had to be invented for the purpose of carrying out such work. They had to convince a dull and stupid financial world, which at present could not conceive business of any magnitude which required ten or fifteen years to fructify.

Mr. L. ROSEVEARE expressed the view that the laying out of the emergency site which the author had described would be a heavenly job. He agreed with most of what had been said, but thought that the author had not taken the question of gradient sufficiently into consideration in dealing with drainage.

Mr. F. L. THOMPSON thought that it would be better to deal with the difficulty of temporary hardness of water at the works. He asked if it had been found practicable at Welwyn to put in actual house connections in advance so as to avoid breaking into the sewer. Also, had the experiment of doubling the services been tried, and, if so, what was the extra cost entailed?

Mr. A. W. E. BULLMORE (Letchworth) thought it was not necessary to select a site for a garden city principally from the engineering point of view, because engineering had now reached such a stage that things could be done at a much cheaper cost than in the old days. Almost any site in England, unless it was waterlogged, would be suitable for a garden city if laid out properly. They stuck to the inter-trap system, but the Welwyn system had worked well, and he was rather in favour of it. He was going to duplicate services on an 80-ft. road to see how it panned out, and he believed it would result in a saving of money.

Mr. K. P. I. COTTERELL dealt at some length with the question of water supplies for garden cities, and expressed the view that care should be taken regarding the disposal of surface water, as it might mean a pollution of the streams.

CAPT. JAMES, in reply, said it was only rarely possible to put in house connections when the services were laid, and that was done in the case of housing schemes, but in other cases, when connections were put in shown to be required by the architects' plans, the plans were immediately altered.

Model County Estate.

We have received from Mr. Ernest E. Taylor, of Farningham, Kent, details of a scheme (in which Mr. George Lansbury is understood to be interested) by which a number of farmers in Maplescombe Valley have offered an estate of not less than 100 acres for the building of a model village. The scheme is that not only will the building provide work, but the product, in lay-out and architectural beauty, might preserve natural Kentish beauty of landscape. Other counties might follow suit, and thus foster the love of amenity and beauty of surroundings throughout the whole country. The scheme, in rough, has been placed before the Dartford Rural District Council.

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

Town Planning Costs.

Mr. Boyce asked the Minister of Health if he could state the date on which his town-planning department was set up; the cost per year since that date; the number of the present staff; and the duties carried out by the Department.

Mr. Greenwood said that Division was set up by the late Local Government Board in 1910 to carry out the whole of the work arising under the Housing, Town Planning, etc., Act, 1909; a separate Division for Town Planning only was not created until 1922. The duties of the Town Planning Division comprised the consideration of questions of town planning policy, the approval of town planning schemes, and matters incidental thereto. The staff at present numbered 26. The cost for each year since 1922 was, approximately, as follows:—1922-3, £8,050; 1923-4, £8,300; 1924-5, £9,300; 1925-6, £10,600; 1926-7, £10,800; 1927-8, £12,500; 1928-9, £12,500; 1929-30, £13,200.

Mr. Boyce then inquired if the Minister was providing office accommodation for the staff of the Greater London Regional Planning Committee; if so, what was the estimated cost; the number of the present staff and the respective salaries paid; under whose control were the offices and staff; and what was the limit of the expenditure.

Mr. Greenwood said that the office accommodation provided by him was negligible. It consisted of the partial use by one of the staff of the Committee of a room occupied by an officer of his Department who, in addition to other duties, acted as secretary to the committee, and, as such, received no salary. Accommodation for the remaining staff was provided elsewhere at the expense of the committee. The number of the present staff was six, and the annual salaries and remuneration amounted to approximately £2,650. The offices and staff of the committee were under their control. The expenditure of the committee was limited by the contributions which the constituent authorities had agreed to pay.

Steel for High Buildings.

Mr. Sorensen asked the Lord Privy Seal whether he had considered the advisability of some assistance being given to enable British steel manufacturers to install the necessary plant to produce the type of steel required for high buildings to be erected in our colonies and elsewhere.

Mr. J. H. Thomas said he assumed that Mr. Sorensen referred mainly to the "broad flanged beam" which was a special feature of the buildings in question, and which was not produced in this country. He was advised that there was not yet a sufficient market to warrant the laying down of a special mill for the production of this type of section.

Slum Clearance.

Miss Lawrence stated that the Minister of Health hoped it would be possible to lay the proposals in connection with slum clearance legislation before the House at an early date after the recess.

Mr. Greenwood informed Mr. Day that work was in progress during the twelve months ended September 30 last on 97 slum clearance schemes, three of which were confirmed in that period. The numbers of properties affected and of persons re-housed during those twelve months could not be stated, but, in all, 1,787 houses were provided, 11 schemes were completed during the twelve months, and these schemes involved the demolition of 758 properties and the provision of re-housing accommodation for 3,192 persons. The ultimate annual Exchequer liability had not yet been ascertained.

QUANTITY SURVEYORS' DINNER

THE Quantity Surveyors' Committee of the Surveyors' Institution held their first annual dinner at the Connaught Rooms, Great Queen-street, W.C., when Mr. J. E. Drower, C.B.E., occupied the chair. Amongst those present were Lord Amulree, Sir Richard Allison, Messrs. E. J. Rimmer, C. Ernest Elcock, E. Stanley Hall, Ian MacAlister, A. Goddard, C. H. Bedells (president, Surveyors' Institution), G. Topham Forrest, Sydney Tatchell, E. Vincent Harris, E. Berry Webber, A. A. Hudson, W. T. Creswell, G. H. Parker (president, London Master Builders' Association), Oswald Healing, G. C. Widdowson, H. L. Langdon, S. L. Porter, Henry Riley, J. M. Theobald, R. B. Mann, A. G. Cross, Henry Vale, W. H. Law, John Watson, H. John Leaning, S. M. Young, J. T. Burt, P. S. Gleed, and E. C. Harris. The Chairman having proposed the customary loyal toasts.

Mr. Oswald Healing proposed the toast of "The Guests" in suitable terms, and the president of the Surveyors' Institution responded. Mr. E. J. Rimmer, also responding to the toast, said the quantity surveyors were the most envied of men, trusted by both employer and contractor. The trust of the contractor was so great that, in contracting, he need not call for any details of their measuring and valuation.

Lord Amulree proposed the toast of "Architecture, the Quantity Surveyor, and the Building Industry," in the course of which he paid a tribute to the excellent work being done by Mr. Parker, the president of the London Master Builders' Association, and Mr. E. J. Brown. Mr. C. Ernest Elcock responded for "Architecture," and whilst thanking H.M. Office of Works for the high standard of their work, referred to the question of Government buildings and architectural competitions and suggested that departmental architects should compete with private architects in the design of public buildings. St. George's Hall, Liverpool (Elmes), Manchester Town Hall (Waterhouse), and the London County Hall (Knott) were a few instances of notable buildings which were the result of open competitions won by young men. He referred to the excellent design prepared in open competition by Mr. E. Vincent Harris for the Board of Trade Offices, Whitehall. This scheme was not carried out. He also said that he wanted it to be known that architects were not out merely for bread and butter, but wanted to ensure that the country got the best architectural talent available.

Mr. Parker, who responded on behalf of "The Building Industry," congratulated the quantity surveyors on the success of their first dinner.

The chairman, responding for the "Quantity Surveyors," said it was not until the middle of last century had been well passed that quantity surveying was recognised as a separate profession. True, there had been measures of artificers' work in very ancient times. When men built Stowe and Kimbolton and Chatsworth and Belvoir they did not care much for cost. The Burlingtons, the Chesterfields, the Manners, the Cavendishes made building their hobby. Like Louis XIV, spending his morning with Le Notre in the gardens of Versailles, they strolled through their parks with their architects, ordering a bridge here, or a temple there, or a waterpiece there. No doubt builders, architects, stewards and agents made a good thing out of it. But with the industrialisation of England in the eighteenth and early nineteenth centuries financial pride of place passed from the great territorial magnates to manufacturers and merchants. Building activity made an enormous stride. The method of estimating was chaotic; local customs differed widely and led to endless misunderstandings and disputes. Out of the chaos order slowly grew, and the expert measurer emerged. In 1805 appeared Crosby's price book; this was a great step forward, but the book gave little indication of the method of measuring, and so disputes went on. Slowly, as years went by, the method of measurement became more and more stabilised and understood, and the measurer became more and more of an expert. Recognition of the quantity surveyor as an independent practitioner came slowly, almost grudgingly; but it came. The building of the Houses of Parliament involved the employment of independent surveyors for the preparation of bills of quantities, and they should be grateful to the War Office and the Admiralty for their early and complete recognition of their profession. They should look back with gratitude on the men who brought them out of obscurity into light; let them remember the names of Hunt, Rickman, Widnell, Gardiner, Theobald, among others, and be thankful. By those men, methods of construction were studied and methods of measurement adopted which were really scientific and translated buildings into units of work such as an estimator could understand. Finally, during the War, the co-operation of contractors and surveyors produced the Standard Method of Measurement applicable to the whole country. This was a long and laborious work, and it was not until 1922 that the document appeared. It had a fine reception, and its use was growing with gratifying rapidity.

Quantity surveying was not reckoned among the learned professions, but it demanded a training as severe as most of them. The quantity surveyor was ever learning; he had ever to be on the alert to follow new methods of construction and the consequent new developments of architecture. Sometimes he had to face the problem of taking off quantities for buildings which at first sight filled him with the sort of bewilderment experienced in contemplating the paintings of Gauguin and Cezanne. But no matter how post-impressionist or cubist or vorticist the buildings might be, the surveyor had to translate them into something clear-cut and definite, so much material dealt with by so much labour in terms to which a price might be applied.

In industry the latest word was "Rationalisation," indicating the adoption of sensible methods into industry. The surveyor did this by eliminating overlapping of effort and the waste of effort. A dozen builders were invited to tender in competition. If a proper bill of quantities was supplied, the work of twelve separate surveyors, giving perhaps twelve different interpretations of drawings and specification, was saved; each builder had a fair chance, for they were tendering on equal terms. The quantity surveyor's business was to hold the balance even between the two parties to the contract, to see that one paid a fair price only for what he wanted, and that the other got a fair price only for what he did.

Mr. A. A. Hudson proposed a vote of thanks to the chairman, which was suitably acknowledged.

INSTITUTION OF STRUCTURAL ENGINEERS

ANNUAL DINNER.

THE annual dinner of this Institution was held last Friday at the May Fair Hotel. Lt.-Col. J. Mitchell Moncrieff (president of the Institution) was in the chair, and among others present were Sir Banister Fletcher, P.R.I.B.A., Sir Roland Nugent, Dr. R. E. Stradling (Director of Building Research, Department of Industrial and Scientific Research), Mr. E. A. Sandford Fawcett (Chief Engineering Inspector, Ministry of Health), Lt.-Col. C. H. Bressey (chief engineer, Roads Department, Ministry of Transport), Dr. D. Adamson (president, Institution of Mechanical Engineers), Major E. K. Middleton (vice-chairman, Federation of Civil Engineering Contractors), Lt.-Col. N. G. Gedye (chairman, Association of Consulting Engineers), Mr. N. G. Hackney (president, Société des Ingénieurs Civils de France, British Section), Mr. E. S. Underwood (president, Institute of Arbitrators), Major R. I. Tasker (president, Incorporated Association of Architects and Surveyors), Mr. G. H. Parker (president, London Master Builders' Association), Mr. G. J. Kavanagh (director, British Steelwork Association), Mr. A. H. Dykes (hon. secretary, Association of Consulting Engineers), and Mr. G. D. Minn (Master of the Worshipful Company of Carpenters).

Sir Roland Nugent, who proposed the toast "Our Country and Empire," said something must be found that would tie the Empire a little more closely together, and this would not be found in five minutes. A very eminent industrialist had told him two days ago that within one week leading members of all three political parties had asked him for a few suggestions for an Empire policy. It was not easy to find out what to do, and he (the speaker) sometimes thought the right thing would be to go right back behind all the political parties and see if we could not get some impartial body representative of all the Empire but not of Empire Governments. The members of this commission should be brought together into a room and set to think about the Empire, and to try to produce something which would work. Imperial Conferences of the old type were composed of men each of whom was tied to a Government and a political party, and such men had not got free minds. It would be worth while trying to get men of ability who had not these ties and predilections to see if they could not think something out.

Major A. H. S. Waters (vice-president of the Institution), proposing the health of the guests, said they had present a few old friends. The Institution had not always been the strong, healthy organisation that it was now. It had been a struggling company in times past, and friends then had been friends indeed, because they were friends in need. That evening there were present no fewer than ten chairmen of professional and kindred societies: the Institution was proud to welcome them.

Sir Banister Fletcher, who responded to the toast, said there was very little difference between architects and structional engineers. In time past there had been no such differentiation, yet great works had been accomplished. In the case of the pyramids of Egypt, nobody had yet given a satisfactory solution of the problem of how they were built. The ancient Egyptians knew very little about mechanics, and how they got up the massive rocks of stone to make those mounds of masonry nobody now was able to understand. If the president of the Institution of Structural Engineers was going to give a studentship or prize during his year of office, it might be for the best idea of how the pyramids could be built by men having very little knowledge of mechanics or architecture. Passing from Egypt, they came to Rome. Think of what the Romans did with concrete. Think of those magnificent thermæ with spans of 80 ft. or more, and no steel in them, as was the case with the works of to-day. Architects were very glad to consult the structural engineer, owing to the fact that building had changed very much in recent years. Steel had come to be used, ferro-concrete was employed in almost all buildings; and architects had to employ structural engineers to help them erect these great structures.

"The Institution of Structural Engineers" was proposed by Dr. Adamson (president of the Institution of Mechanical Engineers), who said that the development of local branches might bring about a much-needed co-ordination between the various engineering societies.

The chairman, replying to the toast, said as to the co-operation of architects and en-

gineers, his own observation told him this was growing better and better every day. The two professions were necessary to each other, but it was very uncommon for a man to be qualified in both. This was the twenty-first year of the Institution of Structural Engineers. It had started originally in a very small way, but was now between 3,400 and 3,500 strong, and was going ahead splendidly. Its examinations were improving year by year. A very high class of young men was attending these examinations and coming into the Institution. He regarded the Institution as essentially not for old men to make reputations, and be members of Council or presidents or anything of that kind, but as an institution for young men. That development was going on day by day.

FACULTY OF ARCHITECTS & SURVEYORS

THE third annual dinner of the Faculty of Architects and Surveyors was held on Friday, December 13, at the Hotel Metropole, under the chairmanship of Mr. W. G. Percy (president). Amongst those present were: Sir Clement Kinloch-Cooke, Sir William Arbuthnot Lane, Sir George Broadbridge, Messrs. C. H. Lawton, H. Langford Moyle, Andrew Brown, and Mr. H. B. Whitfield (general secretary).

After the Royal toast had been proposed by the President, Sir Clement Kinloch-Cooke proposed the toast of "The Faculty of Architects and Surveyors," in the course of which he said he was the chairman of the Architects' Registration Bill Committee, and he endeavoured to get the Bill passed into law. The Faculty, which was founded in 1926, had, he understood, already achieved success. Their membership, which started with 300, was now well on towards a thousand. They had in the past been admitting people whose practice was of good quality, but as the time went on he thought they ought to establish some sort of examination. They had a great work lying before them in beautifying the country. Some of the cottages and bungalows were dreadful, and he hoped they would do their best to persuade local authorities to see that the blemishes on our country were removed.

The President, responding, having paid a tribute to the work of Sir Clement Kinloch-Cooke in connection with the Architects' Registration Bill, said that the Bill came to an untimely end, for which they should feel alternately sorry and glad; glad because it did not provide for the compulsory registration that was so needed, and sorry because it would have been an admirable stepping-stone to a more conclusive and definite registration at a later date. The progress in the Faculty membership continued fairly satisfactory; from its foundation it rose to 400 at the end of the first year, increasing to 550 during the second and to 800 at the end of the third year. Regarding the question of examinations to which Sir Clement had referred, a syllabus was now being prepared. On the question of policy, the administration of the Faculty still pursued its original policy, which, in the main, was the preservation and enhancement of the art of architecture, and the practice of surveying, protecting and promoting the status and interests both professional and social of all practitioners, maintaining amicable relations and intercourse with older and other bodies and endeavouring to stimulate a sympathetic understanding between the professions and the public.

Mr. C. H. Lawton proposed the toast of "The Guests," and Sir William Arbuthnot Lane responded.

Mr. H. Langford Moyle proposed the toast of "The Ladies," which was replied to by Lady Broadbridge.

A vote of thanks to the chairman was proposed by Mr. Andrew Brown and suitably replied to.

THE SURVEYORS' INSTITUTION

A PAPER on "The Landlord and Tenant Act, 1927, in Operation" was read before the Institution by Mr. W. E. A. Bull on December 9. The lecturer said that the Landlord and Tenant Act, 1927, was passed on the 22nd day of December, 1927, and came into operation on the 25th day of March, 1928. It had thus been working for slightly over eighteen months, during which time a number of cases had been decided by the tribunal.

One thing became very noticeable on studying the reported cases, and that was the entire lack of uniformity among the various county courts as to the procedure to be adopted. It was generally thought, and the County Court Rules under the Act certainly appeared to contemplate, that proceedings should be brought into the county court in the first instance as a matter of form, and should then, unless there was good reason, such as a material preliminary point of law to be decided, be referred automatically to one of the appointed referees. Instead one judge was found refusing, against the wishes of one of the parties, to refer the matter, and another judge deciding that he had no jurisdiction to hear the matter in the first instance, and that an automatic reference must take place. Proceedings under the Act were of two kinds: the first comprised actions for compensation for improvements, actions for compensation for goodwill, actions for a new lease in lieu thereof, and actions by mesne landlords under section 8. These were begun by plaint and summons as in any ordinary county court action, and procedure was governed by Rule 11 of O.50 B. All other cases were in the nature of applications, were commenced by ordinary summons, and were governed by Rule 23. Rule 11, so far as material, read as follows:—"Unless the parties shall, within seven days after the expiration of the time limited for service on the defendant of the plaintiff's defence to counterclaim (if any), file a memorandum that they agree to the matter being determined otherwise, the matter shall stand referred for inquiry and report to one of the panel of referees . . . . : Provided that—(ii) a matter shall not be so referred if the judge in his discretion with or without application by either party considers that the matter is more fit to be decided by the court."

As things stood, the procedure on the return day varied. In some courts neither the parties, their solicitors nor counsel appeared, and the matter was automatically referred. In other cases the day fixed for hearing was treated as though it were the day fixed for the trial, and if the judge decided not to refer, the matter was dealt with at once and was disposed of. The lack of uniformity might result in one of the parties being taken unawares, and it was very desirable that practice should be standardised.

Another feature of the early working of the Act was the apparent indifference, possibly through ignorance, of many parties whose interests were affected. It was still not uncommon for a tenant who wished to make an improvement contrary to the terms of his lease to apply for a licence, and to accept one which required reinstatement at the end of the term, even where the improvement was calculated to add to the letting value. Again, cases had occurred where tenants had allowed the time limited for the service of a notice claiming a new lease to expire without even inquiring whether a renewal would be considered, and had subsequently negotiated a new lease. It could not be too strongly impressed upon tenants that they should approach their landlords in good time, and that, if an amicable settlement could not be reached, they should serve a notice, under sections 4 or 5, three years rather than one year before the expiration of the existing tenancy. Any tenant who failed to take early advice as to his position would only have himself to blame if he was unable to claim the protection of the Act.

On the other side, too, the Act did not seem to have affected the prices obtainable for commercial properties subject to short occupational tenancies. It was suggested that possible claims by sitting tenants might have such an effect, but so far no noticeable fall in values had taken place. It was, however, early days for such results.

The provisions of the Act as to improvements were contained in sections 1, 2, and 3. A tenant wishing to make an improvement must, if he desired to be in a position ultimately to claim compensation, strictly conform to the provision of section 3. This section laid down that he must serve upon the landlord notice of his intention to make an improvement, together with a plan and specification. It would seem, however, that where the plan in itself sufficiently described the improvement, lack of a specification would not necessarily invalidate the notice.—(Baldwin *v.* Garrett (L.J., November 3, 1923)).

If within three months from the service of the notice the landlord served notice of objection, the tenant might apply to the tribunal for a certificate that the improvement was a proper improvement. To succeed he must satisfy the tribunal that the improvement—

(*a*) is calculated to add to the letting value of the holding at the termination of the tenancy (sec. 3, sub-sec. 1 (*a*));

(*b*) is reasonable and suitable to the character of the holding (sec. 3, sub-sec. 1 (*b*));

(*c*) will not diminish the value of any other property belonging to the landlord or any superior landlord (sec. 3, sub-sec. 1 (*c*)).

No certificate would be granted if the landlord proved he offered to execute the improvement in consideration of a reasonable increase in rent (section 3, proviso), nor if the improvement would contravene any restriction imposed for the purposes detailed in the proviso to section 3, sub-section (4), (*a*), (*b*) and (*c*).

A tenant's rights to claim compensation for loss of goodwill were contained in section 4. Briefly summarised, such a right would accrue at the *termination of the tenancy on quitting the holding* if—

(*a*) a claim was made in the "prescribed" manner within the defined limits of time (sec. 4, sub-sec. (1) (i.) and (ii.));

(*b*) the tenant proves that by reason of his carrying on a trade or business for not less than five years goodwill has become attached to the premises by reason whereof a higher rent could be obtained (sec. 4, sub-sec. (1));

but no compensation would be payable if—

(1) the tenant determined the tenancy or failed to exercise a reasonable option (sec. 4, sub-sec. (1) (*f*));

(2) the landlord within one month of receipt of the claim offers a renewal on reasonable terms (sec. 4, sub-sec. (1) (*b*)), or offers suitable alternative accommodation on reasonable terms (sec. 6);

(3) the landlord, being a Government department, local or public authority, charity or a statutory or public utility company, requires the premises for own purposes (sec. 4, sub-sec. (1) (*g*));

(4) a reversionary lease has been granted within the terms of section 15, sub-sec. (3); and the compensation might be reduced or extinguished if the landlord intended to demolish the premises or use them for a different and more profitable purpose (sec. 4, sub-sec. (1) (*a*)), or if he proved that the goodwill was due to restrictions imposed by him upon other premises belonging to him or under his control (sec. 4, sub-sec. (1) (*e*)). The sum to be paid as compensation was not to exceed the addition to the value of the holding which was the direct result of the tenant's trading (sec. 4, sub-sec. (1) (*a*)).

GREATER LONDON HOUSING CAMPAIGN

XI.—LOCAL AUTHORITIES' PROGRESS UP TO SEPTEMBER 30, 1929.

By JAMES P. ORR.

THE progress of the Greater London housing campaign has been regularly* reviewed in *The Builder* since September, 1925. The purpose of this article is to bring this review up to September 30, 1929. By "Greater London" is meant Region K of the Minister of Health's statistics—roughly, the area within 15 miles of Charing Cross. As usual, houses rated at more than £35 are excluded, because they are rarely occupied by wage-earners. Houses erected in rehousing schemes—some 3,000, so far—are excluded also, because they do not add to the existing accommodation, but merely provide alternative accommodation in place of houses closed for demolition in slum-clearance schemes.

State-aided Municipal Houses.

In the last six months—*vide* Table I.—the local authorities of Greater London completed 4,537 houses, and so brought their post-War output up to 80,814. The corresponding figures for England and Wales were 35,269 and 502,793 respectively. London is thus falling farther than ever behind the rest of England in municipal housing enterprise. With one-fifth of the population of the whole country, London has less than one-sixth of the post-War municipal houses; and its share of the municipal houses completed in the last six months is little more than one-eighth. Compared with the output of the previous six months, that of the last six months fell 13 per cent. in London, whereas outside London it rose 43 per cent. The fall of 682 (13 per cent.) in London is made up of a fall of 1,608 (55 per cent.) in the L.C.C. output, and a rise of 926 (40 per cent.) in that of the other London authorities. The L.C.C.'s output of 1,268 was far less than that of any other half-year since March, 1926; but the other authorities' output of 3,239 beat all previous records except the 6,414 of the six months to September 30, 1927, just before the subsidy was first cut.

The increase of over 40 per cent. outside L.C.C. estates was, no doubt, attributable to the notice of abolition of the Chamberlain subsidy and reduction of the Wheatley subsidy to £6 as from October 1, 1929. It is to be noted, however, that under the stimulus of the first cut in the subsidy, the first half-year's output up to October, 1927, was nearly two and a-half times that of this last half-year. The difference is, no doubt, partly due to the decision taken by the new Government last July to maintain the Wheatley subsidy at £7 10s., so that the stimulus to rapid construction was effective only in respect of Chamberlain houses, which formed but a small part of the half-year's programme in London. There were no Chamberlain houses on the L.C.C.'s programme, and of the 4,537 houses completed in London in the half-year, only 1,340 were Chamberlain houses.

State-aided Private Enterprise.

The effect of the rush to secure the Chamberlain subsidy to private enterprise before its abolition on October 1 is seen in the high output of 4,812 subsidised private houses in the last six months. This is more than double that of the previous six months, and has been exceeded only by the output of 5,755 in the six months to September 30, 1927, when the lump-sum subsidy was cut down from £75 to £50 per house. Most of the 4,812 houses were built with the Chamberlain subsidy; only 133 with the Wheatley subsidy of £7 10s. per annum, which is conditional on the limitation of rent to a prescribed figure. The largest contributions to the 4,812 were 656 by Hornchurch, 428 by Bexley, 638 by Ealing, 484 by Hayes, and 640 by Mitcham.

In respect of the number of private houses subsidised up to date, Mitcham, with 3,434, has a long lead; the next highest are: Romford, 1,858; Ealing, 1,808; Hornchurch, 1,642; Woolwich, 1,623; Ilford, 1,572; Heston, 1,572; and Bexley, 1,488. In respect of subsidised houses of all kinds, both municipal and private, the leading records are those of Hayes, Middlesex, and Romford, Essex, with 177 and 118 houses per 1,000 of the 1928 population respectively. Hayes has the extraordinary record of 1,198 municipal and 1,025 private subsidised houses for a population which was, in 1921, 6,303, and has since been nearly trebled.

Unaided Private Enterprise.

The steady rise, both in the half-yearly output of houses built without subsidy and in the proportion of such houses to the total of all houses built in the half-year has been maintained. The 12,224 houses built by unaided enterprise in the last half-year were 57 per cent. of the total of 21,573, which beat all previous records except the 25,931 of the six months to September 30, 1927. The share of unaided private enterprise in the total output since the War was 26 per cent. in 1924, and has since been steadily rising, till now it has reached 47 per cent. The chief

*Cf. *The Builder* of 23, i., 26; 9, vii. 26; 18, ii., 27; 15, vii., 27; 20, iv., 28; 10, viii., 28; 4, i., 29; 28, vi., 29.

TABLE I.
PROGRESS IN PRODUCTION OF POST-WAR WORKING-CLASS HOUSES IN GREATER LONDON.

Period.	Local Authorities' Houses.		Houses Built by Subsidised Private Enterprise, Including Public Utility Societies.		Houses Built by Unassisted Private Enterprise of Rateable Value up to £35.		Total.		L.C.C. Houses Included in Column 2.	
	In the period.	To end of period.	In the period.	To end of period.	In the period.	To end of period.	In the period.	To end of period.	In the period.	To end of period.
Column 1.	2a	2b	3a	3b	4a	4b	5a	5b	6a	6b
To March 31, 1924 ..	— ..	28,361	— ..	8,018	— ..	12,588	— ..	48,937	— ..	8,041
12 months to March, 31, 1925	2,676..	30,987	3,481..	11,499	11,417..	24,005	17,574..	66,491	1,472..	9,513
12 months to March 31, 1926	4,891..	35,878	5,351..	16,850	14,872..	38,877	25,114..	91,605	2,232..	11,745
12 months to March 31, 1927	10,569..	46,447	8,660..	25,510	17,593..	56,470	36,822..	128,427	4,799..	16,544
12 months to March 31, 1928	17,330..	63,777	7,207..	32,717	19,510..	75,980	44,047..	172,474	8,992..	25,536
6 months to Sept. 30, 1928	7,311 ..	71,088	3,540 ..	36,257	10,553..	86,533	21,404..	193,878	4,699..	30,235
6 months to March 31, 1929	5,189..	76,277	2,346..	38,603	10,600..	97,133	18,135..	212,013	2,876..	33,111
6 months to Sept. 30, 1929	4,537..	80,814	4,812..	43,415	12,224..	109,357	21,573..	233,586	1,268..	34,379

TABLE II.
OUTPUT OF POST-WAR WORKING-CLASS HOUSES UP TO SEPTEMBER 30, 1929.

Sources of Supply.	Total Output of Houses.			Output per Thousand of Population.				
	A.—In England and Wales.	B.—In Greater London.	Percentage of B. to A.	In England and Wales.	In Greater London.	In Birmingham.	In Liverpool.	In Manchester.
Local Authorities ..	502,793	80,814	16·1	12·75	9·94	25·1	20·5	17·0
Subsidised private enterprise	405,805	43,415	10·7	10·28	5·34	9·7	5·0	7·4
Unaided private enterprise	348,291	109,357	31·4	8·82	13·45	1·3	0·5	1·1
Total	1,256,889	233,586	18·6	31·85	28·73	36·1	26·0	25·5
1928 Population in round thousands ..	39,482	8,132	20·6	39,482	8,132	969	873	756

TABLE III.
DISTRIBUTION OF LOCAL AUTHORITIES' POST-WAR HOUSES IN GREATER LONDON.

County.	Number of Post-War Houses Completed by Local Authorities.				1928 Population in Thousands.	Total Houses Provided by Local Authorities per Thousand of Population.	Total Number of Greater London Local Authorities in County.
	In Six Months to Sept. 30, 1929.		Total up to Sept. 30, 1929.				
	By L.C.C.	By Others.	By L.C.C.	By Others.			
1	2	3	4	5	6	7	8
London	512	514	10,109	10,615	4,469	10·1	30
Essex	749	351	17,497	5,174	1,079	4·8	19
Hertford ..	0	95	0	3,139	141	22·3	9
Middlesex ..	7	1,529	5,149	15,511	1,421	10·9	34
Kent	0	233	762	3,941	298	13·2	15
Surrey	0	547	862	8,055	725	11·1	20
Total, Greater London ..	1,268	3,269	34,379	46,435	8,132	9·94	125
	4,537		80,814				

contributions in the last six months were 705 in Ilford, and what is practically a single group in the neighbourhood of Hendon—viz., 619 in Hendon Rural, 474 in Hendon Urban, 461 in Kingsbury, and 519 in Wembley.

Houses built by private enterprise, whether subsidised or not, are of much the same type, are nearly always built for sale, and are rarely available for letting at rents which families earning less than £4 per week can well afford. They may, however, be indirectly of some use to local authorities in so far as the general shuffle in occupancies that follows on their completion may take some of the better-to-do off the local authorities' waiting lists. They may also extend the margin of credit on which loans for municipal housing are raised.

The great success of private enterprise is mainly due to the facilities for financing house-purchase that the Small Dwellings Acquisition Act provides. Saturation-point seems to be still far off. All round London houses are still being built for purchasers. The rate of building may be declining in some parts; but everywhere houses seem to be occupied as fast as they are built; so, in spite of the cessation of the Chamberlain subsidy, private enterprise, which since March, 1926, has always had a contribution of 64 per cent. of small houses built since the war to its credit, may be expected to maintain that contribution. Consequently, that general decline in the cost of building municipal houses, which might be expected as the result of a decided fall in the demands of private enterprise on the building trade, is not to be expected yet; and, therefore, local authorities cannot yet be expected to provide houses at rents much lower than they have charged hitherto.

Cost and Rent.

A great housing authority, who is building non-parlour houses at £300 each, declares that the trade ought, with proper organisation, to be able to supply them at £265 each; but, to judge by a study of the official record of recent contract prices (average per house in each contract, parlour and non-parlour types separately), the achievement of this desideratum is as yet quite out of sight.

In the six months to March 31, 1929, the range of contract prices was from £480 for a non-parlour house of 825 sq. ft. floor area, in a Greenwich contract of December, 1928, to £329 for one of 645 sq. ft., in an Enfield contract of November, 1928. The corresponding range in the next six months was from £419 for 845 sq. ft., in a Heston contract of June, 1929, to £320 for 700 sq. ft. in Bexley in May 1929. The fall of £9 in minimum cost can have no appreciable effect on rents. Comparatively few parlour houses were included in contracts. The range of this type in the last twelve months to October was from £415 for 864 sq. ft., in Feltham, in January, to £395 for 910 sq. ft., in South Mimms, in May. It is strikingly anomalous that the maximum for the non-parlour type should be far above that of the parlour type, though the floor area of the latter exceeds that of the former by 39 sq. ft.

Similar anomalies are found on analysis of rents in comparison with floor areas and cost. The rents (including rates) of the four-roomers in places mentioned above are :—

In Chamberlain schemes, 16s. 8d. in Greenwich, 15s.4d. in Bexley.

In Wheatley schemes, about 13s. 6d. in both Enfield and Heston, in spite of the great difference in both cost and floor area.

It is disappointing, too, to find that even in boroughs in which extra burdens beyond the Wheatley subsidy have been put upon the rates, in order to bring the rents down, there is still nothing available for the common type of family that needs four rooms at a rent of 12s. 6d. or less. In Poplar, the lowest rent at which a four-roomed house is let by the Council is 15s.; in Woolwich it is 14s. 4d. The Woolwich houses have the exceptionally large floor area of 950 sq. ft., and are unusually well equipped, some being "all electric"; but, if a suggestion from an outsider is not out of place, the erection of houses of the 750 sq. ft. type at a proportionately reduced rent would be an inestimable boon to a wide circle of low-paid workers, who cannot afford 14s. 4d.

Comparison with Birmingham, Liverpool and Manchester.

The Greater London output of post-War houses as at September 30, 1929, is compared with that of England and Wales, Birmingham, Liverpool and Manchester in Table II. As regards the total number of houses supplied per thousand of population, Birmingham still forges farther and farther ahead of the other big cities. London holds second place, mainly by reason of the activity of unaided private enterprise, the output of which in the northern towns is quite negligible. In each of the last four half-years the London output of unaided private enterprise has been about 45 per cent. of that of the whole of England and Wales; whereas in the northern cities the great bulk of the post-War houses have been subsidised. Municipal enterprise in the north has put that of London quite in the shade. For every house per thousand of population provided by local authorities in London, the northern cities have supplied over 2½ in Birmingham, over 2 in Liverpool, and nearly 1¾ in Manchester.

Distribution of New Municipal Houses.

Table III. shows the distribution of local authorities' houses and of population over the six counties into which Greater London extends. The L.C.C. houses built outside London County are available only for residents of the county (Inner London), not for those of the other counties (Outer London). The latter depend for their housing on their five County Councils and 90 Borough and District Councils. These had between them provided 9.8 houses per thousand of population by September 30, 1929; while Inner London had been provided with 10·1 per thousand, viz., 7·7 by the L.C.C. (2·3 in London County and 5·4 outside), and 2·4 by the City and 28 Metropolitan Boroughs.

It is a pity that information is not obtainable as to the extent to which provision of new houses has been counterbalanced by demolition of old houses; it must be very considerable now that houses are being decontrolled so much faster than ever before.

Of the 1,268 houses provided by the L.C.C. in the last six months, no less than 749 were in far-away Becontree and 512 in Downham, on the south-east border of London County. Now that estate development in connection with the Ford motor works to the south of Becontree has commenced, houses in Becontree are in greater demand than of late; and there are on the L.C.C.'s waiting list some 5,000 families ready to go to Becontree.

All these 1,268 L.C.C. houses were built under the Wheatley scheme, with a subsidy of £11 5s. per house per annum for 40 years, thus bringing the aggregate of L.C.C. Wheatley houses up to 23,211, which, with 2,055 Chamberlain and 9,103 Addison houses, makes the grand total of L.C.C. subsidised houses 34,379. The corresponding figures for the City and 28 Metropolitan boroughs in Inner London, and the 95 boroughs and districts in Outer London, were 15,087 Wheatley, 10,779 Chamberlain, and 20,569 Addison houses; grand total, 46,435.

Apart from the L.C.C., the outstanding municipal achievement of the last six months was the completion of 250 Wheatley houses by Enfield. Other large contributions to the total of 3,269 completed by 55 authorities were in Chamberlain schemes, 176 in Hendon, 164 in Greenwich, 157 in Wealdstone, and 100 in Hackney; and in Wheatley schemes 184 in Croydon, 219 in Willesden, 149 in Heston, and 136 in Barking.

Present Position.

The improvement in the general housing position which must have resulted from the erection of 21,573 small houses in the last six months is discounted by the set-back due to demolition of many dwellings to make way for industrial buildings or high-class flats and houses in the ordinary course of redevelopment. Unfortunately, figures to show the number of dwellings demolished are not obtainable; but redevelopment is going on mainly in the older parts of Central London —roughly, in the circle within 3 miles of Charing Cross. It is just there that London's special housing problem lies—the problem of the ill-housed, unskilled workers, who must live near their work in Central London, and who cannot spare more than 12s. 6d. per week out of their family earnings for rent (including rates). Let us call these, for short, the poorer classes of Central London. Evicted from their old homes in the course of the redevelopment of London, these poorer classes are always crowding into whatever accommodation is still available in the neighbourhood, and so aggravating the overcrowding and other bad housing conditions already rife there in consequence of pre-War redevelopment.

Of the 21,573 new houses erected in Greater London in the six months to September 30, 1929, the 17,036 built by private enterprise are of no use to the poorer classes, because they are not let at low rents. Their erection in large numbers in the outer suburbs may there have made landlords of decontrolled dwellings, whose tenants have gone to these new houses, abstain from raising their rents too heavily; but there is no such curb on landlords of Central London, and so they will naturally make the most they can, while they can, out of the heavy demand for decontrolled dwellings near central workplaces. Such dwellings are, therefore, rarely available for any of the poorer classes except the smallest families, who can do with only two rooms each.

Of the 21,573 new houses, only 4,537 were built by local authorities, and only 1,026 of these within London County. Of these 1,026, 294 were built under the Chamberlain scheme, and so are beyond the reach of the poorer classes; so the most that these classes could expect as their share of the 21,573 houses was such few of the remaining 732 Wheatley houses as were offered at 12s. 6d. or less per week; and, no doubt, some of those few were actually taken by families better off than these poorer classes.

In some outlying places, where contracts were given at comparatively low prices, *e.g.*, in Hayes, Yiewsley, Uxbridge, and Enfield, there are municipal houses, mostly three-roomers, available at inclusive rents within 12s. 6d., but far too few to satisfy local needs. In several of the Metropolitan boroughs new housing societies have raised funds at low interest in order to be in a position to provide decent homes at low rents; but what they have been able to do for the poorer classes of Central London is as a drop in the ocean compared with what remains to be done. The Church Army, the pioneers in this movement, have built 128 cottages and flats in Greater London, all four-roomers. These include only 48 within 3 miles of Charing Cross let at rents of 12s. 6d. or less. At these rents financial equilibrium has been achieved only by the writing-off of capital, something over £300 per house. Other societies have built a few small blocks of flats; but the flats available at 12s. 6d. or less are very few, and seldom have more than three rooms.

It is clear, then, that the operations of this last half-year have left the problem of the poorer classes of Central London practically untouched; and anyone who will make a similar analysis of all previous operations to ascertain what houses, old or new, have been made available for these poorer classes will be bound to give the same verdict for the whole ten years' campaign. Indeed, so far as the poorer classes are concerned, the housing position in Central London is getting steadily worse. The faster houses are built for the better-to-do in the suburbs, the faster is the supply of cheap homes in Central London diminished on decontrol, and the greater becomes the tendency to overcrowding in what is left. The most unsatisfactory feature of the position is the

unfair distribution of the benefit of the subsidy, so many families being allowed to enjoy it too long, to the exclusion of others who need it more.

It is not as generally recognised as it should be that the housing subsidy is in effect a grant from public funds towards rent payable by individual beneficiaries. It was intended to meet the needs of the poorer classes; and, like other grants to individuals from public funds, should be withdrawn from particular individuals so soon as they cease to need it. In some few districts the local authorities enforce this principle by giving a week's notice to quit to tenants whose family earnings have so far increased during their tenancy (*e.g.*, when several children have become earners) that the subsidised rent is clearly far below what they can afford. This is only fair to the public purse and to the large numbers of waiting applicants who are in real need of the rent-relief represented by the subsidy. Unfortunately, it is far more usual to treat a tenant of a subsidised house as if he were entitled to remain in possession as long as he pays the rent regularly. There would be far more families relieved from bad housing every year, if there were in subsidised houses the full number of vacancies that there would be on strict enforcement of the rule that grants to private individuals from public funds shall be limited to what is really needed, and shall be withdrawn as soon as the need ceases.

It may be urged that the lack of alternative accommodation makes the enforcement of this principle very difficult, particularly in Central London. The answer is that there is, at any rate, nothing to prevent the levy of the full rent that the beneficiary can afford in cases in which eviction is impracticable or would involve undue hardship; the beneficiary would then be taking his fair share of the public burden, instead of adding unnecessarily thereto, and would be more likely to exert himself to find alternative accommodation, and make way for someone on the waiting list.

There are very similar anomalies as regards pre-war dwellings. The Rent Restriction Act provides protection from eviction and from rent-enhancement to many families who have long since ceased to need such protection, while more needy families are unfairly deprived of opportunities of securing homes which housing societies would be glad to let them have at rents within their means, if they could only persuade the protected families to move out of them.

For suggestions as to how these anomalies could be reduced to a minimum by amendment of the Rent Restriction Act, by co-operation between local authorities and housing societies, and by local surveys directed towards marking down the families in greatest need of early relief from bad housing, the reader must, in view of the length to which this article has run, be referred to the last review (*vide The Builder*, 28, vi., 29).

Prospect.

From the beginning of the current quarter the subsidy is confined to houses to be let, not sold. This change may lead to the construction of more houses for letting; but, unless it also leads to reduction of cost and of rents, it will not improve the housing position, so far as the poorer classes are concerned. The best hope of improvement, especially for the north-west of London County, lies in the fine work of the Sutton Trust, who are building blocks of 540 flats in North Kensington. Of these, 38 one-roomers are to be let at 6s. per week (including rates); 127 two-roomers, at 10s.; 275 three-roomers, at 12s. 6d.; and 100 four-roomers, at 15s. This is the first occasion since 1914 on which a really large group of homes has been provided in London at rents that the poorer classes can afford. The Trust will no doubt co-operate with the Local Councils and housing societies to ensure that the selection of tenants for these new homes shall result in the longest possible chains of relief from bad housing; and the current half-year will then show an improvement far in advance of anything that has hitherto been done for the poorer classes of Central London since the war.

A more remote prospect of improvement, but one which affects not merely one corner but the whole of Central London, arises from the fact that the L.C.C. are at last preparing a programme designed to meet the special needs of the poorer classes of Central London by the erection of large tenement-blocks, for which sites aggregating some 40 acres have already been selected within three miles of Charing Cross.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting!—ED.

Mahogany Substitute.

[REPLY TO "INQUIRER," DECEMBER 13.]

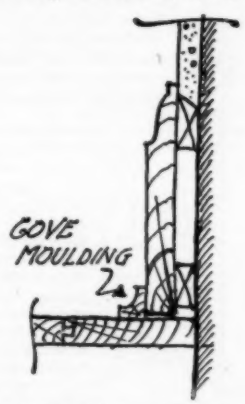
SIR,—The most suitable wood to use as a cheap substitute for mahogany would seem to be birch. It is hard, takes stain well, and when french-polished is difficult to distinguish from mahogany unless closely examined. Birch is frequently used by the manufacturers of furniture which is described as "finished mahogany," and it is often found that even suites sold as "mahogany" have the parts of lesser importance made of birch, and many people are thereby deceived.

ARCHITECT.

Skirting Shrinkages.

[REPLY TO "LAYMAN," DECEMBER 13.]

SIR,—The method suggested of tonguing the bottom edges of skirting boards to the wood flooring was the usual practice in good work some thirty or forty years ago. It entailed a very great deal of work, especially when the floorboards had to be grooved across the grain, as was unavoidable on two sides of each room, and it is doubtful if the benefit was worth the expense even in those days of low labour costs. A very simple and inexpensive device is to fix a small quarter round moulding or a small cove moulding along the bottom of the skirting, and nail these mouldings to the floor, *not* to the skirting. Even if the skirting shrinks away from the floor, the moulding covers the open joint. The appearance is quite good, and from the housewife's point of view is an improvement, as it eliminates dust-collecting angles.



ARCHITECT.

"Layman" will find this subject dealt with in *The Builder*, July 12, page 71.

J. R. T.

Cement-spraying Machine.

[A reply to this inquiry has been posted to our correspondent.]

Venetian Window.

[REPLY TO "SUPERVISION," DECEMBER 13.]

SIR,—Glossary: "A window of large size divided by columns or piers, resembling pilasters, into three lights, the middle one of which is usually wider than the others and is sometimes arched."

J. R. T.

Picture Rails.

[REPLY TO "HOUSEHOLDER," DECEMBER 13.]

SIR,—Some years ago there were on the market steel pins which were driven into the plaster at a downward-pointing angle, and were provided with a large head which fitted snugly up to the face of the plaster. They were said to provide sufficient anchorage for hanging pictures upon, but their efficacy would obviously depend upon the strength of the plaster, which is often lacking.

In rooms which have cornices and where separate picture-rails would be out of place, it is quite a simple matter to form the picture-rail out of the bottom members of the cornice itself, as shown in the sketch. Care must be taken to keep the top of this separate picture-rail as tight as possible up to the bottom edge of the fibrous plaster, or other material, forming the remainder of the cornice, because if this joint is wide, the deep shadow shows as a wide black line, which is very unsightly.

L. E. WALKER.

Cost of Modern Office Work.

[REPLY TO "READER," DECEMBER 13.]

SIR,—1s. 9d. to 2s. per foot could be taken as a basis, according to the sincerity or otherwise of your correspondent's resolve to be simple in treatment. It is easy, however, to top the 2s. 6d. mark.

PLANNER.

Damp Walls.

SIR,—I should be glad of the opinions of your readers as to whether it is advisable to waterproof the surfaces of walls through which the damp has penetrated during the recent unprecedented weather. It is quite clear that the damp, once sealed in, must get out on the inside; but dare we trust the clerk of the weather to turn the tap off for the rest of the season, or are our clients to spend the rest of it in discomfort?

ARCHITECT.

Insurance Question.

SIR,—Is it necessary, by law and the usual R.I.B.A. Contract, for an employer to insure his estimator, under the "Employers' Liability Act," against all accidents during his usual hours of employment? The estimator's pay is such that he does not come within the scope of the National Insurance Scheme.

CONCRETE

THE BUILDING TRADE

RECURRING DEFECTS: THEIR CAUSE, PREVENTION AND CURE.—XXV

By J. R. TAYLOR.

SMALL DOMESTIC HOT-WATER SUPPLIES—*continued.*

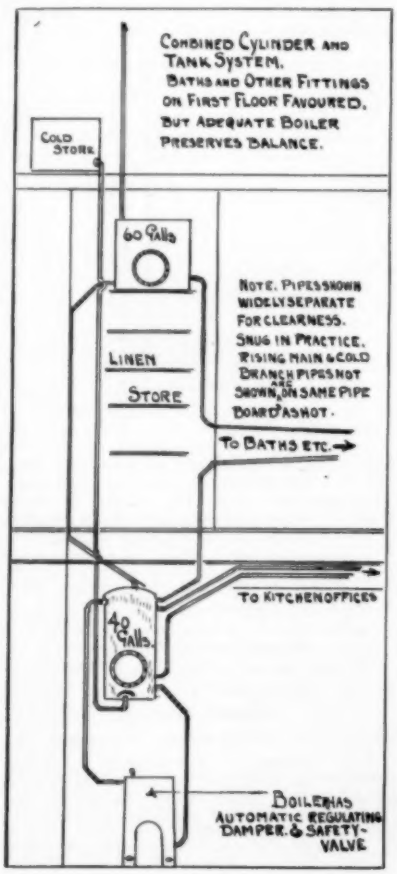
LAST week's article gave consideration to the cylinder connections for the primary flow and return and the secondary flow, leaving the secondary return and the cold feed still to be considered.

SECONDARY RETURN.—It will have been gathered that, after the fire has been lit for a short time, the water in the cylinder is not all at one temperature, but is hottest at the top and coolest at the bottom, and that the degree of heat attained will depend upon the length of time for which the supply remains undrawn upon. Theoretically the connection for the return should be made at that point at which the returning water will be at the same temperature as that into which it enters. But the returning temperature is not constant nor even definitely relative, because the radiation losses on the journey are not constant. On large systems with insulated pipes and a given number of feet radiation, as on low-pressure heating systems, a calculation can be made with approximate accuracy, but on a small domestic supply this does not obtain. Fortunately in these small systems it does not much matter where it is entered so long as it is not nearer than six inches to either top or bottom. There are no losses except by radiation, and the entering water will tend to rise if the connection is low, or fall if it is high, without doing any appreciable harm.

COLD FEED.—Formerly cold feeds were almost invariably connected to the primary return, and in small systems the great majority are still so connected without ill results. I should not so connect them if a handhole was available in the cylinder, nor in any case if the joint had to be made rather close to a *cast*-iron boiler. With an ¼ in. plate galvanised-iron cylinder, a handhole is not unduly expensive, but with a light gauge copper cylinder capable of undergoing the same or a more severe pressure test it is another matter on account of the added weight. Where a handhole is available, the best place for this connection is in the bottom, with a spreader in the form of an inverted saucer secured to the bottom of the cylinder. Where the head of water exceeds 20 ft., no other connection will be better than this, and any additional cost must then be faced.

So far I have considered these connections only as applied to small domestic work in which the architect is faced with the uphill task of competing with the speculative builder by producing a house which will cost but little more, and will more than make up for the increased first cost by the ultimate savings in maintenance charges. I have suggested that one method of effecting these savings is to give the cold pipes protection from frost by running them on the same boards as hot pipes in true circulation with no dead ends, and have had to sacrifice something to attain this; hence some departure from standard. These departures will not, however, materially affect the efficiency of the circulating system and may be safely followed.

LARGER SYSTEMS.—As I have shown, the average range boiler will only heat twenty gallons of water through seventy degrees within an hour and a half of the fire being lit. An average bath holds about twenty-five gallons at a depth of eight inches and the bather will increase this depth by displacement to eleven inches. From this it will be seen that there is but little, if any, margin left for the scullery sink requirements. If, however, the system is of the true cylinder type so that the fire may be safely banked up at night rather better results are obtainable, as the water will be warm when the fire is restarted in the morning. This, however, should only be resorted to as an emergency measure to meet occasional pressure demands or as a safeguard against frost. If it were constantly employed the rapid clinkering would quickly wear out the kitchen range, as the fire linings are not designed to meet these conditions on the lines of those employed with an independent boiler. It is impossible, therefore, to regard the unassisted range boiler as giving a satisfactory hot water service in any but the smallest type of houses. For a house demanding a better supply, the problem resolves itself into choosing between the installation of an auxiliary source of heat to help out the range boiler, or of an entirely independent boiler having automatic controls. Where lump fuel is to be used my own preference is, as a rule, for the independent boiler, mainly because it contents itself with such a small portion of purpose fuel to the amount of material that would otherwise be disposed of as refuse. With a small quantity of coke the use of an automatic cinder sifter enables all sorts of domestic rubbish, including scraps from dishes, tea leaves and potato peelings, not only to be disposed of in a sanitary manner, but if judiciously employed to give a return in heat. The apparatus is procurable in all sizes, and consequently offers facilities for adaptation to a great variety of requirements, either jointly or severally. It is, however, beyond the scope of these articles to go into this subject at any length, and I will content myself with saying that the architect will find as he studies the matter for himself that by combining secondary tanks, indirect coils, and so forth, he may adequately meet many special purposes in a very economical manner.


COMBINED CYLINDER AND TANK SYSTEM.
BATHS AND OTHER FITTINGS ON FIRST FLOOR FAVOURED.
BUT ADEQUATE BOILER PRESERVES BALANCE.
COLD STORE
60 Galls
NOTE. PIPES SHOWN WIDELY SEPARATE FOR CLEARNESS. SNUG IN PRACTICE. RISING MAIN & COLD BRANCH PIPES NOT SHOWN ON SAME PIPE BOARD AS HOT.
LINEN
STORE
TO BATHS ETC.
TO KITCHEN OFFICES
40 Galls
BOILER HAS AUTOMATIC REGULATING DAMPER & SAFETY-VALVE

COMBINED CYLINDER AND TANK SYSTEM.—This article would not, however, be complete without some reference to the combined cylinder and tank system. This system, which ordinarily comprises a cylinder near the boiler and a tank connected to it but placed but little below the cold storage level, was primarily designed to overcome the defects caused by lack of pressure at baths on second, third, or highest floors. It can, however, when the system is served by an adequate boiler be made to give a preference to the baths and other fittings on a first floor on the lines of the accompanying sketch. In considering the disposal of the unions readers must bear in mind that cold water, being heavier than hot, can always be so disposed as to tend to lift the hot water in front of it.

The fittings comprised in the sketch consist of a boiler having an automatic damper, and capable of heating one hundred gallons of water in the hour; a cylinder of forty gallons capacity; and a tank (square or cylindrical but acting on the tank system) of sixty gallons capacity. These sizes are not arbitrary but suggestive.

The first point that will strike the reader is that there is no longer any margin between boiler capacity and combined hot storage. This precaution is not necessary because of the automatic damper. The next point is that neither cylinder nor tank will, after the fire has been lit for an hour, contain any water that has not been raised through fifty heat degrees and that the water in the tank will be considerably hotter than that in the cylinder. There are consequently forty gallons available for the sink and sixty gallons of hotter water ready for immediate use on the bedroom floor. The average hot bath temperature being from 90 to 100 degrees, this will permit of three baths in quick succession, and leave a margin for bedroom lavatory basins. As soon as any water is withdrawn the damper is automatically opened and replacement is rapid. In very large systems the architect will as a rule enlist the services of an engineer. It is better that he should be independent of the trade than that a number of specialists should submit schemes in competition, leaving the architect the difficult task of judging their merits and deciding which offers the best value for money. The scheme should be out early enough to be dealt with by the quantity surveyor so that any variation may be adjusted by him in the same manner as the rest of the work. Quite a number of contractors have found that more profitable prices are obtainable for hot-water work and compete successfully in this branch. The architect may be very sure that the expense of putting half a dozen specialists into competition, each having to prepare plans, etc., has ultimately to be borne by his clients.

A SUGGESTION.—With one more suggestion I must leave this subject for the present. The modern tendency is to require hot and cold services to be laid on to the bedrooms. This involves great length of pipes and casings and makes it difficult to dispose of them without either upsetting the decorative scheme or putting in a lot of badly designed runs under the floorboards. When waste pipes, soil pipes, water pipes, gas and electric conduits, bells, telephone wires, and the additional external branches to drains are all

properly considered on a measure and value basis, I am convinced that it will be found that sufficient can be saved by avoidance of unnecessary length and repetition to pay for a working space of, say, 2 ft. 6 in. between ground floor ceiling and first floor in a house of six bedrooms. If central heating is also a feature, then a working shaft leading from the heating chamber might also be incorporated with advantage.

A correspondent writes as follows :—

"SIR,—For nearly 20 years I have used a very simple heat gauge in connection with the hot-water system in my house. I attached a large black spirit thermometer to the flow pipe from boiler to tank. The thermometer is painted in bars of blue, green, red, orange, and yellow, on one side of the glass tube. Nobody troubles about the figures. Green shows water left to get cold. One red space means water comfortably warm. 'Two reds' = water for dish-washing. 'Three reds = good hot bath. 'One yellow' = a bath that can stand the mixture of about one-third cold; and so on. I admit the method of gauging is rough and ready, but it never fails. As for heat retention in the system, pipes and tank are so thoroughly lagged that I have heated up for a bath on a Thursday night, and taken it on Saturday night."

J. A. D.

BUILDING RESEARCH

COMPILED under the direction of Dr. R. E. Stradling, and issued by the Department of Scientific and Industrial Research, the Report of the Building Research Board for 1928 has now made its appearance, and may be obtained, price 3s. 6d., from any of H.M. Stationery Offices. There is much of the very first importance to interest architects and the general building industry. Among the objects of general and special research, the deterioration of building materials under the action of weathering agents has received much attention. Work was concentrated largely on the following problems :—(*a*) Efflorescences, their causes, effects and prevention; (*b*) factors influencing the distribution of moisture; (*c*) selective decay; (*d*) biological agencies in stone decay; (*e*) the action of calcium sulphate; (*f*) the action of frost; (*g*) tests for estimating resistance to weathering; (*h*) remedial measures.

Under the last heading, it is suggested that the replacement of decayed stone by new stone is an expensive method of repair, and, at least, for minor repairs, the use of plastic compositions provides a useful alternative, since the work can be done from cradles instead of from scaffolding, and less labour is required. To ensure success, it is very important that the repairs should be adequately bonded to the stone, and this can best be done by cutting away the decayed stone to a good face, undercutting the edges, and drilling holes at various angles. For the heavier repairs, further strength should be provided by using dowels of hard tile, or of non-corrosive metal, and also by reinforcing the repair with non-corrosive wire. When Portland cement mortar is used for the execution of plastic repairs, special precautions must be taken to avoid crazing and too rapid drying. When oxychloride cements are used, the work needs to be carried out under careful control, for the hydrochloric acid sometimes present is apt to cause chemical reaction, forming deliquescence.

On the question of surface treatments, the Report says that a promising method lies in eliminating the soluble salts which are the principal cause of decay by regular washing with water. The use of preservatives is deprecated. In all cases tested the surface coatings produced by the treatments have gradually weathered away, and there was little to indicate that the stones had been treated, especially as the treated stone absorbed water almost as readily as the untreated. Paint seemed to be the only real protective, but to be effective the paint must be renewed at intervals. Æsthetic grounds also argued against its use. The same objection really applied to the so-called "colourless" waterproofing solutions.

Cleaning of Buildings.

On the question of the cleaning of buildings, the Report states that the steam process has much to recommend it. The process had fallen into disrepute owing to the frequent appearance of efflorescence after the completion of the work, which caused rapid decay of the fabric. Several buildings had been examined during the year which had been steam-cleaned, and it was definitely ascertained that the efflorescence observed was to be attributed to the use, with the steam, of alkalies as soda-ash, caustic soda or sodium peroxide, and not to the withdrawal of salts already in the pores. Most chemical processes for cleaning stone involve the use of strong acids or alkalies, and are extremely detrimental. A system of washing buildings at regular intervals is found, says the Report, to be a cheap and effective way of keeping stonework clean and retarding decay, even under the conditions prevailing in densely populated districts. More than one London building could be cited in illustration, but the outstanding example is the Goldsmiths' Hall, Gresham-street, which has for some years been washed with hoses twice a year. Some difference of opinion exists regarding the desirability of preventing the blackening of buildings. From the practical standpoint, there can be no question that soot and dirt are undesirable, since their presence on buildings causes decay. From the artistic aspect, it is difficult to believe that the architect who designs in masses with due regard to the effects of light and shade, and who selects his materials for their colour, character, or texture, can tolerate the presence of soot and grime, which hide the beauty of his materials and obliterate the craftsmanship of his design.

Special reference is made to the selection of the stone for the repair of the Houses of Parliament. After examining the merits of various limestones and sandstones, on the balance of considerations, it was concluded that of the two stones, Clipsham and Ketton, the former was likely to prove the more satisfactory. That is not to say that Ketton stone would be unsatisfactory, or that the repairs should be restricted to Clipsham stone. For ashlar work, especially in sheltered situations, the use of Clipsham or Ketton might be open to some objection, and selected Anston would be preferable.

Materials.

According to the Report, the work at the Building Research Station on the nature of pozzolanas and on the effect of adding them to Portland cement and lime mixes has been continued during 1928, in co-operation with various sections of the industry concerned. At present the scheme of work is mainly restricted to examinations of accessible clays and such spent oil shales as have already been found to be pozzolanic (cf. Annual Report, 1927, p. 47). Owing, however, to the lack of knowledge of the precise significance of pozzolanic activity, some of the more important fundamental work on this subject is, of necessity, proceeding simultaneously. Mortars and limes and plasters have also come under searching analysis. Practical plaster trials with limes have shown that the figure obtained by the Emley plasticimeter is a true index of the actual working plasticity of the material. A number of commercial specimens of quicklime have been examined in accordance with the proposed specification methods, and, in some cases, partial reports have been made to the makers for their information.

On the question of lime in general, the report states that the rate of settling of a lime suspension in water has been found to give valuable indications of the qualities of the lime, particularly for plastering and for chemical use. A proposed standard method of carrying out this test has been developed. On problems connected with plastering in general, a number of cases of failure of plaster in practice have been investigated, in particular the disastrous fall of a ceiling in Westminster. Up to the time of writing, however, there was not sufficient information to report.

Further studies included :—Wood-block flooring mastic; artificial stone; structure and strength of materials (accompanied by many valuable tables); vibration; wind pressure; efficiency of buildings from the standpoint of the user (including reports on the heating of rooms and architectural acoustics). On the matter of acoustics, attention is drawn to the fact that the practical value of sound-absorbent materials lies in the reduction they effect in the period of reverberation when introduced into rooms and halls in which, otherwise, clear audibility of speech and music would be impaired by reverberation and echoes. The materials have been tested by measuring the reduction in the period of reverberation of a calibrated test chamber after a known area of material is placed in it. The sound absorption coefficients of the materials have been determined over a range of audible frequencies. The materials tested comprise a number of wall-boards, a special acoustic plaster, and a lining and partition material. Some of the wall-boards have good sound-absorbent properties, but experiments indicate that their value in this respect is much lessened by painting. This is probably due to the paint sealing the fine pores in which incident sound energy is dissipated. The type of decoration applied to a material, introduced as a sound absorbent, requires very careful consideration if serious damage to the absorptive properties is to be avoided.

This report is something which every architect, surveyor and builder who wishes to keep abreast with the times should unfailingly possess.

INCORPORATED CHURCH BUILDING SOCIETY.

AT a meeting of the Incorporated Church Building Society, held at 7, Queen Anne's-gate, Westminster, on November 21 (Sir Cecil Harcourt-Smith, C.V.O., LL.D., in the chair), grants were made towards building new churches at: Chesterfield, St. Augustine, £120; Leigh-on-Sea, St. Margaret, £250.

Towards rebuilding the churches at: Habergham Eaves, St. Matthew, £200; Llangynidr, SS. Mary and Cynidr, £50.

Towards reseating or repairing the churches at: Batcombe, St. Mary-the-Virgin, £25; Boston, St. Botolph, £200; Bothamsall, St. Peter, £15; Chadwell, St. Mary, £40; Chevington, All Saints, £30; Colchester, St. Mary Magdelene, £35; Collier Row, The Ascension, £20; Forest in Teesdale, St. James, £13; Hamstead Marshall, St. Mary, £30; Llaneilian, St. Eilian, £10; Llanfair Discoed, St. Mary, £10; Lugwardine, St. Peter, £20; Orcop, St. Mary, £10; Stour Provost, St. Michael, £15; Studland, St. Nicholas, £50; Thurlbere, St. Thomas, £15; Upton, St. Margaret, £30.

Grants were also made from the Mission Buildings Fund towards the Mission Churches at: Anlaby (Yorks), £100; Bridgemary (Hants), £25; Dukestown (Mon.), £50; Rhoslefain (Merioneth), £20.

The following grants were paid for works completed at: Aldershot, Holy Trinity, £50; Ashley, St. Mary, £20; Beddington, St. Michael, £150; Brixton Deverill, St. Michael, £30; Castlenau, £75; Caxton, St. Andrew, £40; Clifton, St. James, £20; Drypool, St. Columba, £300; Easington Colliery, Ascension, £200; Fotheringhay, St. Mary and All Saints, £30; Frindsbury, All Saints, £25; Frinton, St. Mary, £300; Hendred, West, Holy Trinity, £25; Horkesley, Great, All Saints, £100; Islington, St. Matthew, £30; Johnstown, St. Mary, £200; Llangeinwen, £50; Merton, All Saints, £30; Odell, All Saints, £20; Sheen, East, All Saints, £150; Shepherd's Bush, St. Thomas, £50; Shiney Row, St. Oswald (Durham), £75; Sketty, St. Paul, £60; Winthorpe, St. Mary, £25.

In addition to the above, the sum of £1,184 was paid towards repairs to 44 churches from Trust Funds held by the Society.

LAW REPORT

STEEL ERECTORS AND BUILDING CONTRACTORS.

Sequel to Accident at Spitalfields Market Extension.

In the Shoreditch County Court recently before Judge Cluer, the Aston Construction Co., Ltd., of Eagle Wharf-road, N., steel contractors, sought to obtain an indemnity from Messrs. John Mowlem & Co., Ltd., building contractors, of 41, Ebury Bridge-road, S.W., in respect of their liability to pay compensation to John Chambers, a steel erector in the employ of the plaintiffs, who was injured by falling down an open lift well at Spitalfields Market extension, where the defendants were carrying out a building contract. They contended that the defendants had committed a breach of their statutory duty in failing to protect the lift well by means of a fence or guard. The defence raised was a denial of responsibility for the safety of the premises, and it was also set out that the workman was a trespasser. Mr. Edgar Dale appeared as counsel for the plaintiffs, and Mr. F. Wynn Werninck, barrister, for the defendants.

Mr. Dale said the defendants were contractors in connection with the extension of Spitalfields Market, and the plaintiffs were responsible for the steelwork. At the hearing of the arbitration brought by Chambers against the Aston Construction Co., Ltd., the employers contended that the accident did not arise out of the man's employment because he was a trespasser, and the judge found that he was taking a short cut in the course of his employment, and that it arose out of his employment. The plaintiffs had been engaged at the Market since 1926. They were also engaged upon a "rush" job near Bouverie-street for a newspaper, and Chambers, on August 22 last, was sent from Bouverie-street to fetch some bolts from Spitalfields Market. He made two journeys, the accident happening on the second.

John Chambers gave evidence and said that on the day of the accident he was on a night shift. There was a fence round the Market extension, and on the first occasion he got under the scaffold poles and went to the watchman's hut for a lamp. On the second occasion he got under again, and fell into the lift well. There was no barrier except the scaffold fence outside.

Cross-examined, the witness said that no work was going on at the time in the block where the accident happened. It was not true that a lot of material was lying about. He knew there were holes inside the building. He had never seen these holes covered, but one might expect them to be covered at night.

Mr. Werninck submitted that the workman contributed to the accident by his own negligence.

Judge Cluer: He has admitted it himself.

Mr. Dale said he would ask His Honour to find that the workman's contributory negligence was not the final cause of the accident, which was the absence of a fence round the lift well.

Judge Cluer said that the defendants might be liable to a penalty under the Factory Acts, but not otherwise liable. If he went to the opening of the Market and saw a hole such as this and fell down it, he would not expect to recover damages from Mowlems. He would give judgment for the defendants, with costs.

The Foch Memorial.

M. Georges Malissard, the sculptor of the Foch memorial statue at Cassel, has, we learn, received a commission from the British Foch Memorial Committee for the replica to be erected in London.

UNEMPLOYMENT INSURANCE

"GENUINELY SEEKING WORK."

Considerable difficulty has been experienced in Committee on the Unemployment Insurance Bill in framing the clause (4) in the Bill which is directed to doing away with the provision that an applicant shall prove "that he is genuinely seeking work but unable to obtain suitable employment." This was introduced in the Act of 1924 at a date when the present Government was in office. The difficulty has arisen because in the present Bill the Government are seeking, in accordance with the recommendation of the Morris Committee, in relation to paragraph iv of section 3, subsection (1) of the Act of 1924, which introduced the above provision, to alter the burden of proof and to lay it upon the administrative authorities. It is not surprising that such an entirely new departure has proved difficult of expression in an Act of Parliament. In every department of life the person making a claim or seeking to bring himself within a statutory provision is called upon to make out his case, but under the Bill it is the Department which in the first instance has to prove that a specific situation was refused by the claimant, or that suitable employment, either in the claimant's usual occupation, or in other suitable occupation, was available. It is surely an extraordinary proposition that the administrative officers under an Act of this nature should have such a duty laid upon them, and if this almost impossible task is placed upon them there must be increased staffs and an increase in the administrative expenses. At the time of writing it has been agreed that the clause in question shall stand over for a day or two in order that the Government may re-draft this clause, but as that will not conclude the matter, perhaps one or two observations on the question are admissible.

In the principal Act of 1920, before it was amended by the Act of 1924, paragraph (iii) of section 7, subsection (1) read: "That the insured contributor must prove that he is capable of and available for work but unable to obtain suitable employment." It is to be noted that it is the words "genuinely seeking" that have given rise to the difficulty that the Government is endeavouring to obviate, as the word "genuinely" has introduced a moral element and a stigma is placed upon the man who has been held not to have fulfilled this condition. The Blanesburgh Committee recommended that some fuller definition of "genuinely seeking" work should be framed, but did not arrive at such a definition in any concrete form, and now Parliament is experiencing the practical difficulties involved. We cannot but think that the simplest and best way of solving this question would be to revert to the provision of the principal Act of 1920 and to require claimants to prove "that they are capable and available for work but unable to obtain suitable employment." There is no hardship in requiring applicants to prove this, and the moral element imported by the Act of August, 1924, by inserting the expression "genuinely" is eliminated at once. The above expression imports the degree of proof required under the Workmen's Compensation Act; it places the first onus upon the applicant of proving simple facts within his own knowledge, leaving the Department to disprove the truth of his allegations, but to make the Department take the first step and prove that employment is available is to place the cart before the horse, and it is hardly surprising that difficulty has been experienced in Committee in making progress under those conditions.

Change of Address.

The head office of the National Federation of Master Painters and Decorators of England and Wales is now at 19, Brazennose-street, Manchester, where all communications should now be sent.

WORKMEN'S COMPENSATION

A private member's Bill was read a second time in the House of Commons on November 29, the intention of which was to remove the hardship inflicted on injured workmen under the Workmen's Compensation Act by reason of the decision in the House of Lords in Bevan *v.* Nixon's Navigation Company, which we explained in full in our last Legal Section. The Bill took the form of an amendment to section 9, subsection (4), of the Workmen's Compensation Act, 1925, and the principle of the Bill was accepted with general approval, but the Home Secretary, Mr. Clynes, pointed out that in its present form it would fail to carry out the intentions of the promoters, but if read a second time he undertook to advise the House on the Committee stage what amendment should be made to render the Bill operative. Mr. Clynes's observations were fully justified, for the hardship experienced in this particular case, owing to the interpretation the majority of the House of Lords felt constrained to place on the statute in question did not arise under section 9, subsection (4), at all, although the decision has had a bearing on the interpretation to be placed on that subsection which has since come into operation.

Bevan *v.* Nixon's Navigation Co. was tried under the Act of 1906, as the accident happened before section 9, subsection (4), which was first introduced in the Act of 1923, became operative. The decision was based upon paragraph (1) (3) of the First Schedule to the Act of 1906, which provided that in the case of partial incapacity the weekly payment should in no case exceed the difference between the amount of the average weekly earnings of the workman before the accident "and the average weekly amount which he is earning or is able to earn in some suitable employment or business after the accident." The majority of the House of Lords held that this referred only to the physical condition of the workman, and did not include his inability to obtain employment of that class for which after the accident he was found physically fit. The manner in which section 9, subsection (4), became involved in that decision was that the majority of the House of Lords, although that sub-section was not before the House for decision, claimed that it supported their decision, as showing that the Legislature had no intention of reversing the decision in Cardiff Corporation *v.* Hall, a case which practically was the subject of appeal before them. The subsection enables the Court to award compensation as for total incapacity to a workman who is only partially incapacitated and who has so far recovered from the injury as to be fit for employment of a certain kind, if he proves that "he has taken all reasonable steps to obtain, and has failed to obtain, such employment, and that his failure to obtain such employment is a consequence wholly or mainly of the injury." It was these last words that the majority of the House relied upon. The minority took an opposite view, holding that the subsection supported their opinion so far as it was relevant at all. In the consolidating Act, 1925, the provisions as to calculating compensation in cases of partial incapacity occur in the same section as the subsection in question, section 9, but in subsection (1) (3) in the rules for calculating the compensation the same words as appeared in the Schedule of the Act of 1906 are retained, viz., "the average weekly amount which he is earning or is able to earn in some suitable employment or business after the accident." Thus in view of the divergent opinions expressed in the House of Lords on the effect of the two provisions the object to be attained by the Bill now presented is to secure that both subsections may so be framed as to avoid the effect of the decision in Bevan *v.* Nixon's Navigation Co.

NEW BUILDINGS IN LONDON

Balham.—SHOPS.—On the site in the High-road, formerly occupied by the South-Western College of Music, it is proposed to erect a block of shops, showrooms and offices, with garages at the rear. The scheme is estimated to cost about £6,000. Messrs. Sampson and Hutchcroft, of 188, Garratt-lane, S.W.18, have secured the main contract. The steelwork is to be carried out by Messrs. Smith, Walker, Ltd., of 16, Caxton-street, S.W.1.

Camberwell.—RECONSTRUCTION.—It is proposed to rebuild the "Baker and Basket" public-house, at 41, Ormside-street, S.E. The owners are Messrs. Wenlock Brewery Co., of Wenlock-road, N.1.

Clapton.—ALTERATIONS.—For alterations and additions to 18, Clapton-common, and the erection of lock-up garages at rear, for Mr. J. Fineman, the tender of Mr. I. J. Galinski, at £4,400, has been accepted. Mr. Brian L. Sutcliffe, A.R.I.B.A., 7, Duke-street, Wigmore-street, W.1, is the architect.

Croydon.—HOUSES.—For 20 houses in Kensington-avenue, the Croydon Council has entered into a contract with Messrs. Truett & Steel, Ltd., of Thornton Heath. Their price was £9,177.

Drummond-street. — GARAGE. — Messrs. "Evening Standard" Co., Ltd., 47, Shoe-lane, E.C.4, are to erect a large garage to accommodate a number of their distributing vans. The new building has been planned by Mr. A. Rangeley, F.R.I.B.A., 30, Cross-street, Manchester. The main building contract has been placed with Messrs. William Downs, Ltd., of 12, Hampton-street, S.E.17.

Ealing.—EXTENSIONS.—Alterations and extensions are to be carried out at the University College Hall in Queen's-walk, Ealing, for the Governors. Mr. Brian L. Sutcliffe, A.R.I.B.A., architect, 7, Duke-street, Wigmore-street, W.1. The builders are Messrs. Frank Parvin, Ltd., The Broadway, Mill Hill, N.W.7. The tender price is £9,985.

Ealing.—HALL.—Alterations are to be carried out on a new church hall erected in Argyle-road for the West Ealing Congregational Church. The architect is Mr. P. W. Meredith, 34, Old Queen-street, S.W.1.

Ealing.—HOUSES.—Messrs. T. P. Bennett & Son, 41, Bedford-row, W.C.1, are the architects for 26 houses on the Rectory estate, Northolt, for the Estates Improvement Trust, Ltd.

East Ham.—FACTORY.—It is proposed to erect a new factory at the junction of Church-road and Grantham-road. The plans have been prepared by Mr. T. Anders, architect, Beehive Estate, Eastern-avenue, Ilford. Messrs. J. T. Luton and Son, Ltd., 14, Forest-lane, E.15, are the contractors.

Elstree.—STUDIOS.—Messrs. World Studio Centre, Ltd., Ground-buildings, Trafalgar-square, W.C.2, are to erect large new sound-film studios.

Eltham.—GARAGE.—A new motor garage is being built in High-street by Mr. W. Martin, builder, Bexley-road, S.E., to the plans of Messrs. Kevan & Buen, architects, Bedford-row, W.C.1. The constructional steelwork will be supplied by Messrs. Young & Co., 6, Queen Anne's-gate, Westminster, S.W.1.

Fulham.—BATH.—An open-air swimming-bath, to cost £12,000, is proposed for Bishop's Park, Fulham, S.W.

Green-lanes.—BANK.—A scheme is shortly to be put in hand for the conversion of No. 109 into branch bank premises for Messrs. Barclays Bank, Ltd. The architects are Messrs. North, Robin and Wilsdon, of Townsend House, Greycoat-place, S.W.1.

Greenwich. — HOUSES. — Tenders for the erection of 79 houses of varying types on the Charlton Park estate are being invited by the Greenwich Borough Council.

Holborn.—CHURCH.—A £6,000 scheme is in hand in connection with the restoration of St. Sepulchre's Church. The plans have been prepared by Sir Charles Nicholson, Bt., F.R.I.B.A., of 2, New-square, Lincoln's Inn, W.C.2.

Holborn.—CONVERSION.—Mr. Brian L. Sutcliffe, A.R.I.B.A., architect, has prepared plans for the conversion of 26 and 27, Devonshire-street, W.C.1, into flats. The work is being carried out for Mr. A. F. Brown by Messrs. Robertson & Cameron, of 13-16, Addington-square, Camberwell, S.E.5, at £3,387.

Hornsey.—ALTERATIONS.—For alterations and improvements to the swimming-pool in Crouch End, the Hornsey Council has placed a contract with Messrs. Ebenezer King, Ltd., 27, Whitefriars-street, E.C.4. The amount of the tender is £3,490.

Jermyn-street. — ALTERATIONS. — For the erection of a new shop-front and alterations at 76, Jermyn-street, W.1, for Mr. C. Topper, Messrs. A. Edmonds & Co., Ltd., of Constitution Hill, Birmingham, have secured the contract.

Kennington. — CONVERSION. — Messrs. Mathews and Co., of 159, Blackfriars-road, S.E.1, have in hand a large conversion scheme. On the site of property adjoining and at the rear of No. 42, New-street, a block of shops, flats and garages is to be erected. The plans have been prepared by Mr. R. E. Smith, F.R.I.B.A., of 235, Westminster Bridge-road, S.E.1.

Morden.—REBUILDING.—Messrs. Hodgsons' Kingston Brewery Co., Ltd., of Eden-street, Kingston-on-Thames, are to rebuild their premises, "The George" public-house, in London-road. The scheme has been planned by Messrs. Yetts, Sturdy and Usher, of 34, Gordon-square, Bloomsbury, W.C.1.

Petty France.—BUILDINGS.—Messrs. F. R. Hipperson & Son, of 6, Broad-street-place, E.C.2, has secured the contract for the erection of soldiers' quarters at Petty France, S.W.1, for H.M. War Office

Richmond.—EXTENSIONS.—Richmond Town Council has bought premises in Hill-street for £5,500 with a view to the extension of the Town Hall adjoining.

Rotherhithe-street. — RECONSTRUCTION. — Messrs. Courage and Co., Ltd., of Horseley-down, S.E.1, are to rebuild their premises, the "Blacksmiths' Arms." The new building has been planned by the company's own staff architect.

St. John-street. — EXTENSIONS. — At the annual prize distribution to the students of the Northampton Polytechnic Institute, St. John-street, E.C., Mr. S. C. Laws referred to the scheme for the extension of the Institute. The site opposite the existing building is already in possession of the governing body, and for the extension the L.C.C. has agreed to provide £35,000 of the estimated cost of £50,000.

Southgate.—STATION.—Included in the scheme for the extension of the North London Tube from Finsbury Park to Cockfosters (Hadley Wood), is the erection of a new station at Chase Side Corner, opposite Bourne Hill. Plans will be prepared by the Chief Architect, 55, Broadway, S.W.1.

Tottenham Court-road. — REMODELLING.—Messrs. Marconiphone Co., Ltd., propose to put in hand a scheme of alterations in connection with their premises. The architects are Messrs. Wallis, Gilbert and Partners, 29, Roland-gardens, South Kensington, S.W.7.

Upper Woburn-place. — FLATS.—A large block, to contain 75 flats, is shortly to be erected. The plans have been prepared by Messrs. Marshall and Tweedy, architects, 273, Regent-street, W.1. Messrs. John Knox and Dyke, Ltd., of 4, Cavendish-place, W.1, have secured the contract for the work.

Walthamstow.—BUILDING.—The Walthamstow Town Council are considering a scheme for the erection of a new town hall.

Wembley. — FACTORY. — Messrs. W. J. Cearns, of Carpenters-road, Stratford, E.15, have secured the contract to erect a ground-floor factory at Wembley Hill estate, Wembley. The plans have been prepared by Messrs. Henry Butcher & Co., factory specialists, 63/64, Chancery-lane, W.C.2.

West Hill.—HOME.—The Governors of the Royal Hospital and Home for Incurables propose to erect a new nurses' home. The scheme is estimated to cost between £15,000 and £20,000.

NEW CINEMAS

Blackpool.—The County Borough has passed plans for the proposed cinema in Westcliffe-drive, for Mr. F. Barker. The architects are Messrs. Mercer & Duckworth, of New Dock-chambers, Fleetwood.

Cambridge.—Plans have been passed by the Town Council for the reconstruction of the Central Cinema, in Hobson-street, for the Central Cinema (Cambridge), Ltd., whose manager is Mr. P. V. Wallis.

Liverpool.—A contract has been placed with Messrs. George Platt & Sons for the demolition of property at the corner of Lime-street and Elliott-street, to make way for the new cinema for the Associated British Cinemas, Ltd., for which Mr. A. E. Shennan, F.R.I.B.A., of 14, North John-street, Liverpool, is architect. Demolition is to be completed about the end of January, when it is expected that the work of erection will start.

Manchester.—Messrs. F. Read, A. L. Ward and A. Snape are, it is learnt, to erect a 1,800-capacity cinema on a site at Broadheath, towards Altrincham.

Sydenham.—Plans are now ready for the erection, in Lower Sydenham, of a 2,500-capacity cinema, "The State." The building owner and architect is Mr. A. C. Matthews, of 86, College-road, S.E.21.

SMETHWICK FIRE DISASTER

IN the course of a letter to the Press on this subject, Mr. P. F. Rowell, secretary of the Institution of Electrical Engineers, writes as follows:—"The attention of the Council of the Institution of Electrical Engineers has been drawn to newspaper reports of the proceedings at the inquest upon eleven persons who lost their lives by reason of a fire at premises in Rolfe-street, Smethwick. Some of the evidence purported to show that the fire was due to a defective electrical installation in a neighbouring building, and in this connection one of the witnesses condemned the use of lead-covered rubber-insulated cables for the wiring of public buildings. This statement has caused great uneasiness in the minds of consulting engineers, architects, electrical contractors and others, inasmuch as the use of lead-covered rubber-insulated cables is permitted by, and the proper methods of installation of such cables are set out in, the "Regulations for the Electrical Equipment of Buildings" issued by the Institution. These Regulations are recognised by consulting engineers, electrical contractors, electricity supply authorities and the fire offices, as representing the best standard practice, and the fire offices in particular recommend their use. The Council reaffirm, therefore, that they are of the opinion that lead-sheathed cables are both suitable and safe for electrical installations if installed and maintained in accordance with the I.E.E. Wiring Regulations. From the evidence given, as reported in the newspapers, there is every indication that the electrical installation which, it is suggested, caused the fire at Smethwick, did not comply with these Regulations."

RATES OF WAGES IN THE BUILDING TRADE

[Every endeavour is made to ensure accuracy but we cannot be responsible for errors.]

	Masons.	Bricklayers.	Carpenters Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Accrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Aldershot	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Alfreton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Alnwick	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Altrincham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ashford Kent	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Ashington	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Ashton-under-Lyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Aylesbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Aylsham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Banbury	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Barnsley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barnstaple	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Barrow-in-Furness	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Basingstoke	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Berwick	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bexhill	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Birkenhead	1/9	1/9	1/9	1/10	1/9	1/9	1/9	1/3½
Birmingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bishop Auckland	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Blackburn	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackpool	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bolton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bradford-on-Avon	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Braintree	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Brentwood	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bridgwater	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Bridlington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bromsgrove	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bromyard	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Bungay	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Burnley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Burton-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Buxton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Cambridge	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Canterbury	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Cardiff	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Carlisle	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Chester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chesterfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chorley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Cirencester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Clacton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Cranbrook	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Crewe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Cromer	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Darlington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Deal	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Denbigh	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Derby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Devizes	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Dewsbury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Doncaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Dorchester	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Dorking	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Dovercourt	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Driffield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Droitwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
E. Glam. (Mon. Val.)	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Ely	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Exeter	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/5½	1/2
Exmouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Fakenham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Felixstowe	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Frome	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Glossop	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Godalming	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Goole	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Gosport	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Grimsby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Halifax	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Harpenden	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Harrogate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hartlepools	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Harwich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hatfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Hednesford	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Hereford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Herne Bay	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Hertford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hitchin	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hoddesdon	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Holt	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Huddersfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hull	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hunstanton	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Huntingdon	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Isle of Wight	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Keighley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Kettering	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Kidderminster	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
King's Lynn	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leicester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leighton-Buzzard	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Lincoln	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Littlehampton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Liverpool	1/9	1/9	1/9	1/10	1/9	1/9	1/9	1/3½
Llandudno	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Llanelly	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
London:								
12 m. radius	1/9	1/9	1/9	1/9*	1/9	1/9	1/8	1/4
12-15 m. radius	1/8½	1/8½	1/8½	1/8½*	1/8½	1/8½	1/7½	1/3½
Loughborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Lowestoft	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Macclesfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Maidstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Malvern	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Manchester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Mansfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Margate	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Market Harb'rough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Matlock	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Melton Constable	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Melton Mowbray	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Merthyr Tydfil	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Middlesbrough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newark	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Newbury	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newcastle-on-Tyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newcastle-ur-Lyme	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
New Forest	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newmarket	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newport, Mon.	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Nottingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Nuneaton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Paignton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Peterborough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Plymouth	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Pontypridd	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Preston	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ramsgate	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Redcar	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Redditch	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Reigate	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Retford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Ripon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Rochdale	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Rochester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Rugby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Saffron Walden	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Sawbridgeworth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Saxmundham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Sevenoaks	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Sheffield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Sittingbourne	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southend-on-Sea	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
South Shields	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stevenage	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Stockport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stockton-on-Tees	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stoke-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stourbridge	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stourport	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stowmarket	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Stratford-on-Avon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Stroud	1/5	1/5	1/5	1/5	1/5	1/5	1/4½	1/0½
Sunderland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swaffham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Swansea	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swindon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Tamworth	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Taunton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Thetford	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Torquay	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Totnes	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4	1/0½
Trowbridge	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Uttoxeter	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wakefield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Wallsend	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Warminster	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Warrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Warwick	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Wells (Norfolk)	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Welwyn Gar. City	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
West Bromwich	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Weston-sup.-Mare	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Weymouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Whitby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Wigan	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Winchester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Windsor	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Wisbech	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Wolverhampton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Woodbridge	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Worksop	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Worthing	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Wrexham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Wroxham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Wymondham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
York	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½

* The rate recognised by the National Association of Plasterers, Granolithic and Cement Workers, is 1/11½ per hour.

For Building Trade wages in Scotland, see page 1082.

PLUMBING TRADE "SOCIAL"

A SOCIAL function in connection with the Plumbing Trades Central Apprenticeship Council for London was held on Friday evening last at the Borough Polytechnic. Mr. W. D. Carõe, F.R.I.B.A., occupied the chair, and among those present were:—Messrs. Alec Grant (vice-chairman), Bertram Hellyer, J. W. Stephenson, C. E. Robinson (president, Institute of Plumbers), C. M. Smeaton (president, National Federation of Plumbers and Domestic Engineers), Hugh Davies, Martin S. Briggs, John H. Hamlin (hon. secretary), and many others.

Mr. Alec Grant occupied the chair until the arrival of Mr. Carõe, who was unavoidably delayed, and in the course of a few introductory remarks pointed out that this was the fourth gathering they had held. The socials, he said, were designed to bring apprentices and employers together, and should be helpful in many directions. It was their duty to give the public the best possible service they could. Illness could often be traced to defective plumbing work, and they must therefore design, construct, and carry out their work in accordance with the latest principles.

Mr. J. W. Stephenson, in the course of an address to the apprentices, described the Council as an attempt to re-establish the idealism of the ancient guilds—to revive craftsmanship and make provision for sickness and death. He wanted the apprentices to realise that in learning their trade completely they were not only becoming good craftsmen but were preparing their minds to enjoy life. To enjoy what they were doing was the secret of happiness, and the only way to achieve this was by diligence in class work.

Mr. C. E. Robinson, proposing a vote of thanks to Mr. Stephenson, suggested that plumbers should try to make their work more beautiful. Pipes were often strung about like string, and main stacks of soil pipes could often be better designed than they were.

Mr. W. H. Fairclough seconded the motion, which was supported by Mr. C. M. Smeaton, Mr. Bispham (principal, Borough Polytechnic), Mr. Fretwell, and Mr. Hugh Davies, the last-named speaker emphasising the importance of a broad outlook on life and recommending the study of good architectural books, such as Ruskin's "Seven Lamps of Architecture."

Mr. W. D. Carõe, in a brief address to the students, endorsed Mr. Hugh Davies' remarks. Any work, he said, in which the true spirit of art was dwelt on was worth reading, and anything that lifted one on to a higher plane was worthy of study. Plumbing should not be regarded merely as a means of making money but as an art to be proud of.

Mr. Blackman (secretary, Institute of Plumbers) proposed a vote of thanks to the chairman, which was seconded by Mr. Walter Scott (general secretary, National Registration of Plumbers), who emphasised the value of a knowledge of science to students, whom he urged to take up one or two physics courses if the opportunity afforded.

The votes of thanks were enthusiastically accorded, and the whole company then sat down to tea in the library.

The Polytechnic, Regent-street.

The sixth annual dinner and reunion of past and present students of the Surveyors' and Auctioneers' Section of the School of Architecture will be held on Wednesday, January 8, at Stewart's Quadrant Restaurant, Regent-street. Mr. W. Woodbridge Biggs, F.S.I., will occupy the chair. Tickets can be obtained from Mr. Denis R. Bull, P.A.S.I., 51, Grosvenor-avenue, East Sheen, S.W.14.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed, that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given is the latest date when the tender, or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender, etc., may be obtained.

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; County Architect, C.A.; Surveyor, S.; Engineer, E.; Borough Architect, B.A.; Architect, A.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc

DECEMBER 23.

Chipping Sodbury.—Repairs.—Also recovering roofs at Woodend, Frampton Cotterell, 12 houses, Dodds-lane, Pucklechurch, 8 houses, for R.D.C. R. Wilson, clerk.

Edinburgh.—Installation.—Electric, at Nursery school, Tollcross, for E.C. J. Stewart, Executive Officer, Education Offices, Castle-ter.

Glamorgan.—Building.—For (1) Gowerton intermediate school, dining-hall and cloak room, and (2) Penarth intermediate school, additional cloakroom accommodation, for C.C. H. Rowland, clerk.

Guildford. — Alterations. — Also additions to Borough police station, North-st., for T.C. J. W. Hipwood, B.E. and S.

Hull.—School.—Elementary school in Flintongrove, for 1,280 scholars, for E.C. D. Harvey, A.R.I.B.A., City Architect. Dep. £2 2s.

Leeds.—Houses.—On Dewsbury-rd. housing estate, for T.C. J. E. Acfield, City E.

Liverpool.—Alterations.—Also additions to Wavertree technical school, Picton-rd., for T.C. Land Steward and Surveyor. Dep. £1 1s.

Long Eaton.—Houses.—11, Hawthorne and Myrtle-av., and 52, Wellington-st. and Duckholm-rd., for U.D.C. H. Raven, architect, Town Hall. Dep. £5 5s. each.

Norwich.—Additions.—Alterations and additions to "Quebec Tavern" public-house, Quebec-rd., for Morgans Brewery Co., Ltd. T. Foster Johnson, L.R.I.B.A., Surveyor. Dep. £2 2s.

Rochdale.—Painting.—Internal to 50 houses on Clarke's-lane estate and 61 houses on Kilworth-st. estate, for C.B. B.S.

Windermere. — Reroofing. — Retort house with asbestos sheets, and appurtenant works, for U.D.C. F. Carlisle Needham, E. and S.

DECEMBER 24.

Dunbar.—Houses.—8 houses and 8 cottages, for T.C. G. Simpson, F.R.I.B.A., architect, 30, Rutland-sq., Edinburgh.

DECEMBER 26.

Glasgow.—Flats.—43 two-story tenements, and 153 two-story flats at Carnwadrie housing scheme, for T.C. D. Stenhouse, T.C.

Glasgow.—Painting.—Painter work required in connection with 288 houses at M'Nair-st. and Shettleston housing scheme, for T.C. D. Stenhouse, T.C.

Stirling.—Clearance.—Demolition of stone and brick work of old buildings on west side St. Mary's Wynd, for T.C. A. H. Goudie, B.E. Dep. £1.

DECEMBER 27.

Macclesfield.—Additions.—To parish church institute in Cumberland-st., also for painting of same, for Vicar and Wardens of Macclesfield Parish Church. T. Roylance Lawton, architect, 21, Hibel-rd., Macclesfield.

Salford.—Alterations.—Structural alterations, asphalting, and partitions, at Frederick-rd. Open-air school, for T.C. H. H. Tomson, T.C.

Sheffield.—Houses.—82 non-parlour type and 6 house-shops, on Wybourn estate, for T.C. W. G. Davies, F.R.I.B.A., City Architect. Dep. £2.

DECEMBER 28.

Farnham.—Alterations.—Also decoration of (1) new library, Brightwells; (2) alterations to accountants' office, Council Offices; (3) new cash office, Council Offices, South-st., for U.D.C. L. H. Starling, E. and S.

Hereford. — Houses. — 40, College-rd. housing estate, for T.C. Bettington & Son, architects, Palace-chams Dep. £2 2s.

Penrhiwceiber. — Repairs. — Ceilings, repairing, and renovating of Hermon Welsh C.M. church, for Trustees. T. Roderick & Sons, architects.

DECEMBER 30.

Darwen.—Houses.—12, in Slough-rd., for T.C. B.E. Dep. £2 2s.

Galway.—Addition.—Also alterations to hotel, for Gt. Southern Railways. Chief Engineer, Westland-row Station, Dublin, C.S. Dep. £1 1s.

Loughborough.—Fire Station and Firemen's Cottages.—Erection of, for the Corporation. Harry Perkins, Town Clerk, Loughborough. Dep. £3 3s.

Rochdale.—Showrooms.—Electricity showrooms and offices, Smith-st., for C.B. S. H. Morgan, B.S. Dep. £2 2s

Sheffield.—Alterations.—To casual wards at Fir Vale House, for B.G. S. Elden Minns, L.R.I.B.A., architect, Wharncliffe House, Bank-st. Dep. £5.

***Sleaford.**—Additions.—To the County Offices, for the Kesteven C.C. Clerk of the Council, County Offices, Sleaford, Lincs.

Southwold.—Houses.—6 non-parlour, North-rd., for T.C. J. S. Hurst, B.S. Dep. £2 2s.

Stevenage.—Houses.—58 in Whites Mead-rd., for U.D.C. Reg. A. Gandy, E. and S. Dep. £2 2s.

West Riding.—Installation.—Low pressure hot water gravitation heating installation and plumbers' work in domestic hot water installation, at Whitwood Mining and Technical Institute, for West Riding E.C. Education Officer, County Hall, Wakefield.

DECEMBER 31.

Bradford.—Heating.—Low pressure hot water heating apparatus, etc., and electric passenger and goods lifts, at shop and office premises, Leeds-rd., Bridge-st., and Hall Ings, for T.C. City Architect

Cardiff.—Extensions.—To laundry block, new coal bunkers, and new coal house at Sanatorium, for T.C G H. Whitaker, City Architect

Faringdon.—Conveniences.—Conversion of certain premises in Southampton-st. into public conveniences, for R.D.C. J. W. Harris, architect, East Challow, Wantage.

Maidenhead.—New Diphtheria Block.—Erection of, at their Isolation Hospital, for the T.C. The Town Clerk, Guildhall, Maidenhead. Dep. £3 3s.

Regent's Park, N.W. — Construction. — Of a Children's Boating Pond, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

Rochford.—Balcony.—At Poor Law Hospital, for B.G. W. Harding Roberts, clerk, 27, Victoria-av., Southend-on-Sea.

Rugby.—Painting.—Certain work at Harborough Magna Infectious Diseases Hospital, for Rugby Joint Hospital Board. M. E. T. Wratislaw, clerk, 16, Church-st.

Southall.—Telephone Exchange.—Erection of, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep., £1 1s.

Southampton. — Extension. — Hampton Park Telephone Exchange, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

Sunderland.—Heating.—Accelerated low pressure hot water heating at telephone exchange, for H.M.O.W. Contracts Branch, King Charles-st., S.W.1 Dep. £1 1s

Sutton.—Extension.—Of Sorting Office, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s.

Teddington.—Compressed Air Tunnel Building.—Erection of, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

Wimbledon.—Cycle Store and Dressing Room.—Construction of, for the Borough Council. Borough Engineer's Office, 123, The Broadway, Wimbledon, S.W.19. Dep. £1 1s.

JANUARY 1.

Curragh.—Painting.—Internal and external, at Plunkett and Connolly Barracks, Curragh Camp, Co. Kildare, for the Minister for Defence. Secretary, Department of Defence (Contracts Section), Parkgate, Dublin. Dep £1 1s

Egypt.—Ironwork.—Wrought-iron doors, grilles, balustrades, etc., for Board's new headquarters at Alexandria, for International Quarantine Board of Egypt. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. B.X. 5719.)

JANUARY 2.

Folkestone.—Telephone Exchange.—Erection of, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

London.—Alterations.—To electric lighting installation at South-Western Fever Hospital, Landor-rd., Stockwell, S.W.9, for M.A.B. T. Cooper, Engineer-in-Chief. Dep. £1.

Shipley.—Extension.—Textile shed at Technical school, for West Riding E.C. Education Officer, County Hall, Wakefield.

JANUARY 3.

Durham.—Alterations.—For the Commissioners, H.M.O.W. Contracts Branch, King Charles-st. London, S.W.1. Dep. £1 1s.

JANUARY 4.

Garston, near Watford.—New County Council School.—Erection of, for the Herts C.C. A. Ernest Prescott, County Surveyor's Office, Hatfield, Herts. Dep. £1 1s.

Nantwich.—Houses.—60 non-parlour type on Dog-lane site, for U.D.C P. H. Paten, S. Dep. £2 2s

Near Newcastle, Staffs.—Nurses' Home.—Erection of, for the Stoke and Wolstanton Union. The Clerk, Union Offices, Stoke-upon-Trent. Dep. £3
Rock Ferry, Birkenhead.—School.—Erection of, for the Education Committee. Town Clerk, Town Hall, Birkenhead. Dep. £2 2s.
Woking.—Cottages.—10 pairs, at Lower Knaphill, for U.D.C. E. and S.

JANUARY 6.

East Acton.—Flats.—Erection of 28, for the Town Council. The Town Clerk, Borough of Acton, Municipal Offices, Acton, W.3. Dep. £2 2s
Stockton-on-Tees. — Additions. — Also alterations to Norton elementary schools, High-st., Norton, for T.C. J. P. Wakeford, B.E., Victoria Buildings. Dep. £1 1s.
Walton-on-Thames.—Houses.—18 pairs of semi-detached in Cromwell-rd., for U.D.C. R. Wilds, E. and S.

JANUARY 7.

Blayney.—Extensions.—Alterations and repairs, St. Mary's Church, Muckno, Castle Blayney, for Rev. A. T. Canon Maguire, P.P., and Parochial Committee. J. F. McGahon & Son, architects, Dundalk. Dep. £5 5s.
***Brentford.**—New School.—Erection of, for the Brentford and Chiswick U.D.C. Clerk and Solicitor of the Council, Town Hall, Chiswick, W.4. Dep. £3 3s.
***Dartford.**—Houses.—Erection of 14 houses, for the U.D.C. J. James Hurtley, Clerk to the Council. Council Offices, Dartford. Dep. £2 2s.
***Greenwich Park, S.E.**—Boating Pond.—Construction of, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.
Rowley Regis.—Public Sanitary Convenience.—Erection of, for the U.D.C. Daniel Wright, Clerk to the Council.

JANUARY 8.

***Mount Pleasant, E.C.**—Internal Painting.—At the Parcels Office, for the Commissioners, H.M.O.W., Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

JANUARY 9.

Charlton Park.—79 Houses.—Erection of, for the Metropolitan Borough of Greenwich. Town Clerk, Town Hall, Greenwich. Dep. £2 2s
***Newcastle-on-Tyne.**—Alterations.—To the County Court, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.
Stockport. — Convenience. — Public convenience, near "Touchstone Inn," Wellington-rd. North, for C.B. H. Hamer, B.S.

JANUARY 10.

***Croydon.**—Slipper Baths, etc.—Erection of, for the Corporation. Town Clerk, Town Hall, Croydon. Dep. £3 3s.

JANUARY 11.

Newtownards.—Conversion. — Reconstruction of existing workhouse buildings into district hospital, for B.G. Young & Mackenzie, chartered architects, Belfast. Dep. £5 5s.
Wexford. — Reconstruction. — Courthouse and County Office, for Wexford C.C. W. F. Barry, C.S. Dep. £5 5s.

JANUARY 13.

***London.**—Blocks of Dwellings.—Erection of, at Lambeth and Stockwell, for the L.C.C. The Clerk of the Council, the County Hall, Westminster-bridge, S.E.1. Dep. £2.
West Derby.—Building.—(*a*) Alder Hey Hospital, Eaton-rd., West Derby: proposed reception and special treatment department, new operating department, and department for sick nurses; (*b*) Walton Institution, Rice-lane, Walton: proposed stores for X-Ray films; (*c*) Alder Hey Hospital, Eaton-rd., West Derby: proposed stores for X-Ray films, for B.G. E. B. Bailey, F.S.I., L.R.I.B.A., architect, 34, Castle-st., Liverpool.

JANUARY 15.

***Bransty.**—New School.—Erection of, for the Whitehaven Corporation. Town Clerk, Town Hall, Whitehaven. Dep. £2 2s.

JANUARY 22.

Brentford.—Building.—Steam disinfector at West Middlesex Hospital, Isleworth, for B.G. F. E. Harmsworth, clerk, Toolands House, 34, Twickenham-rd., Isleworth.

JANUARY 31.

***Didcot.**—School.—Erection of, for the Berkshire E.C. W. C. F. Anderson, Education Secretary, Shire Hall, Reading. Dep. £2 2s.

NO DATE.

Brynmawr.—Houses.—Boiler-houses at Brynmawr Council and Brynmawr County schools, for Breconshire C.C. H. C. W. Strickland, county architect, County Offices, Brecon.
Near Otley.—Additions.—Also alterations to the the White Hart Hotel, Pool, near Otley, for Tadcaster Tower Brewery Co., Ltd. Garside and Pennington, architects and surveyors, Pontefract.

MATERIALS, etc.

DECEMBER 24.

Edinburgh.—Flags, etc.—For Northern Lighthouses. Superintenden, 84, George-st., Edinburgh.

DECEMBER 28.

Isle of Wight.—Road Materials.—For C.C. A. J. A. Harris, County Highways Surveyor, County Hall, Newport, I. of W.

DECEMBER 30.

Beckenham.—Bricks.—153,000 red paving bricks, 2 in. thick, for U.D.C. H. Storr Best, S. Dep. £2.
Hereford.—Road Materials.—For T.C. City E.
London.—Tarring Roads.—About 66 miles, for Islington B.C. B.E.

DECEMBER 31.

Dover.—Tar.—30,000 galls., for T.C. W. Boulton Smith, B.S.
Dover.—Granite Chippings.—For T.C. W. Boulton Smith, B.E.
Leyton.—Highway Materials.—For T.C. B.E. and S.
London.—Sand, etc.—For Wandsworth B.C. J. A. Nicholl, T.C.
Montgomery.—Road Materials.—For C.C. Wm. Owen Jones, C.S.
Rhondda.—Road Materials.—For U.D.C. E. Taylor, E. and S.

JANUARY 4.

Dunmow.—Road Materials.—For R.D.C. P. E. Furlong, S., 58, New-st.
Johannesburg.—Tar, etc.—Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. B.X. 5914).
Soke of Peterborough.—Highway Material.—For C.C. H. Russell, C.S.

JANUARY 6.

Lindsey (Lincs).—Highway Materials.—For C.C. A. G. Bradshaw, C.S.

JANUARY 11.

Dorset.—Road Materials.—For C.C. C.S.

FEBRUARY 3.

Cairo.—Asphalt.—Egyptian Ministry of Public Works, 6,800 metric tons of asphalt for Tanzim Department, Cairo. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. B.X. 5923.)

NO DATE.

Litherland.—Road Materials.—For U.D.C. A. J. Harrington, clerk, Sefton-rd.

ENGINEERING, IRON AND STEEL

DECEMBER 23.

Glasgow.—Bridges.—Two steel plate-web girder bridges, for T.C. D. A. Donald, E., 271, Alexandra-parade, Glasgow, E.1. Dep. £3 3s.
West Riding.—Widening.—Of bridge carrying Westwood new road over lines of L. and N.E. Rly. Co., approx. 800 yds. north of Westwood Station, Wortley, for C.C. West Riding Surveyor. Dep. £1.

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West Riding.—Bridge.—Bridge to carry Todmorden, Halifax and Burnley main road over Rochdale Canal Mytholmroyd, for C.C. West Riding Surveyor. Dep. £1.

DECEMBER 24.

Newcastle-upon-Tyne. — Construction. — Timber fendering, at North River Pier of High Level Bridge, for Tyne Improvement Commission. A Blacklock, secretary, Bewick-st.

DECEMBER 30.

Loughborough.—Sewage.—Extensions to disposal works, for T.C. W. Granger, B.S. Dep. £3 3s.

JANUARY 2.

Johannesburg.—Bridgework.—Structural bridgework, for South African Railways and Harbours, Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X. 8791.)

JANUARY 3.

***Muswell Hill.**—Sewers, etc.—Making good of Page's Hill, for the Borough of Hornsey. Town Clerk, Town Hall, Highgate, N.6.

JANUARY 6.

Salisbury.—Bridge.—Reinforced concrete bridge, for T.C. Howard Humphreys & Sons, Consulting Engineers, 29, Victoria-st., Westminster. Dep. £3 3s.

JANUARY 7.

Romford.—Sewerage.—Main outfall sewer about 4,000 yds. in length, including 600 yds. of 48-in. cast iron pipes and 3,400 yds. of 48-in. concrete tubes, together with 12 settling tanks, 12 bacteria beds, humus tanks, for U.D.C. Willcox & Raikes, engineers, 33, Great Charles-st., Birmingham. Dep. £5 5s.
Sunderland.—Reconstruction.—Also widening of Roker Baths-rd. Bridge, for C.B. B.E.

JANUARY 8.

Blackpool.—Bridge.—Steel plate girder bridge in three spans on brick and concrete abutments, to be constructed over L.M. and S.R at Bispham Station, for C.B. Francis Wood, B.E. and S. Dep. £1.
Portsmouth.—Drainage.—1,926 lin. yds. of foul and surface water sewers, varying from 9 in. to 36 in. in diameter, manholes, etc., together with surface water pumping station and four sewage pumping sfation, electricity sub-station, etc., in Cosham district, for T.C. R. J. Jenkins, City E. Dep. £5 5s.

JANUARY 9.

Johannesburg.—Steelwork.—Structural steelwork, etc., for South African Railways and Harbours, Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X. 8834.)

JANUARY 31.

Johannesburg.—Bridgework.—Structural bridgework, for South African Railways and Harbours, Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X. 8686.)
Johannesburg.—Steelwork.—Structural steelwork, etc., for points and crossings shop, for South African Railways and Harbours. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X. 8687.)

FEBRUARY 1.

Cairo.—Bridge.—Over River Nile at Kasr-el-Nil, for Main Roads and Bridges Department. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X. 8704.)

MARCH 3.

Australia.—Pipes.—Pipes, valves and receivers, with accessories for high-pressure services at Yallourn Power Station extensions, for State Electricity Commission. Agent-General for Victoria, Victoria House, The Strand, London Charge £2 2s.

MARCH 4.

Wellington, N.Z.—Structural Steel.—Structural steel, galvanised screens and ladder rungs, for Public Works Department, New Zealand. Department of Overseas Trade, 35, Old Queen-st., London, S.W.1. (Ref. A.X. 8785.)

ROAD, SEWERAGE, AND WATER WORKS

DECEMBER 23.

Aylesbury.—Sewer.—Sewering, levelling, metalling, kerbing, and channelling of roads and footpaths on Council's estate at California, for T.C. W. H. Taylor, B.E. and S. Dep. £1 1s.
Carmarthenshire. — Widening. — Road diversion and widening at Treventy-bridge, Cross Hands, of Pontardulais-Carmarthen main road, for C.C. D. S. Samuel, C.S., Carmarthen. Dep. £2 2s.
Finchley.—Paving.—Providing and laying creosoted deal blocks, including reinforced concrete foundations, in main roads, for U.D.C. T. Harrison, 9, The Hawthorns, Regent's Park-rd., Finchley N.3. Dep £2.
Gravesend.—Drainage.—Main drainage scheme in part of borough known as "No. 3 Sand Area," including picking up existing house drains and connecting to public sewers, for T.C. F. T. Grant, B.E. and S. Dep. £5.
Woodford.—Paving.—Asphalt paving to carriageway, including reinforced concrete foundation, sewers, surface water drainage, kerbing, channelling, pavings, crossings, etc., in Snakes-lane, for U.D.C. A. D. Ward, S. Dep. £3 3s.

DECEMBER 28.

Dunoon.—Extension.—Of cemetery, for Dunoon and Kilmun Parish Council. R. Muir Lang, clerk. Dep. £2 2s.

DECEMBER 23.

Edinburgh.—Sewers.—9 in. dia. and 12 in. dia. fireclay pipe sewers, length approx. 3,139 lin. yds., for T.C. B.E.

Edinburgh.—Sewer.—Concrete tube and brick sewer of 4 ft. and 3 ft. 6 in. dia., length approx. 1,000 yds., for T.C. B.E.

Edinburgh.—Sewer.—New fireclay pipe sewer, for T.C. B.E.

DECEMBER 30.

Beckenham.—Paving.—4,000 super. yds. of artificial stone paving, for U.D.C. H. Storr Best, S Dep. £2

Beckenham.—Making-up.—Clement-rd., Sewards-rd., Villiers-rd., The Drive, Church-av., The Crescent, and St. George's-rd., for U.D.C. H. Storr Best, S. Dep. £2.

Milton.—Sewer.—3,000 yds. sewer, mostly 12 and 15 in. dia., with manholes, ventilating shafts, etc., for U.D.C. A. J. Martin, E., 108, St. George's-sq., Westminster. Dep. £3 3s.

Oldham.—Improvements.—Certain streets and passages, for C.B B.E. and S. Dep. £1 1s

Ruislip-Northwood.—Sewers.—Laying of soil and surface water sewers, with manholes and incidental works, at South Ruislip, for U.D.C. H. R. Metcalfe, E. and S. Dep. £2 2s.

DECEMBER 31.

Dover. — Widening. — Of Elms Vale-rd. from Church-rd. to Borough boundary, for T.C. Wm. Boulton Smith, B.E., Maison Dieu House, Dover. Dep. £2 2s.

Leicester.—Surfacing Works.—On Braunstone estate, for T.C. J. S. Fyfe, A.R.I.B.A., Housing Architect. Dep. £2 2s.

JANUARY 1.

Birmingham.—Sewer.—Widening and reconstruction of Island-rd. and part of Sandwell-rd., and widening and reconstruction of Bunbury-rd. and Church-rd., Northfield, for T.C. H. H. Humphries, City E. and S. Dep. £2 each.

JANUARY 6.

Ely.—Mains.—New cast-iron water mains in Littleport, for R.D.C. Silcock & Simpson, engineers, 25, Victoria-st, Westminster, S.W. Dep. £5.

JANUARY 7.

Cairo.—Mains.—Water mains for town of Luxor (Upper Egypt), for Ministry of Interior. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. No. A.X. 5812.)

JANUARY 8.

Twickenham.—Making-up.—Of Rosslyn-rd., Arlington-rd., Ravensbourne-rd., Riverdale-rd., Riverdale-gardens, for T.C. G. R. King, B.E. and S. Dep. £2 2s.

JANUARY 14.

Hertford.—Sewer.—Laying approximately 93 lin. yds. of a 15-in. stoneware pipe sewer, average depth 4 ft. 6 in., and other works in connection therewith, in Hertingfordbury-rd., Hertford, for T.C. B.S. Dep. £2 2s.

FEBRUARY 18.

Londonderry.—Pipes.—Provision and laying of a double line of 12-in. steel pipes, with cast steel ball and socket joints, in trench under bed of River Foyle, for T.C. W. Criswell, engineer, Guildhall. Dep. £5 5s.

Auction Sales, Tenders, etc.

JANUARY 14.

Dorchester.—Drivers, Jonas & Co., will sell, at the White Hart Hotel, Dorchester, Oxon, Freehold Residential or Business Premises, situate in High-st. and Queen-st., comprising the College premises, with 30 rooms and garden; the Institute with 7 rooms and garden; cottage and yard. Auctioneers, 7, Charles-st., St. James's-sq., S.W.1.

Public Appointments

DECEMBER 23.

Eastbourne.—Clerk of Works.—(Temporary). Leslie Roseveare, Borough Engineer, Town Hall, Eastbourne.

Brighton.—Assistant Building Inspector, Borough Engineer and Surveyor, Town Hall, Brighton.

DECEMBER 27.

Plymouth.—Three Architectural Assistants (temporary) required. J. Wibberley, A.M.Inst.C.E., Municipal Buildings, Plymouth.

DECEMBER 30.

***Carlisle.**—Second Architectural Assistant required by the U.D.C. Percy Dalton, A.M.Inst.C.E., A.R.I.B.A., City Engineer and Surveyor, 18, Fisher-st., Carlisle.

DECEMBER 31.

Derby.—Estates Manager required by the T.C. Town Clerk, Market-place, Derby.

Exeter.—Architectural Assistant required in the City Architect's Dept. John Bennett, City Architect, Exeter.

JANUARY 3.

***Sunderland.**—Clerk of Works required in the Surveyor's Department. Town Clerk, Town Hall, Sunderland.

JANUARY 4.

***Dorset.**—Architectural Assistant (temporary) required by the County Council Clerk of the Council, County Offices, Dorchester.

JANUARY 6.

***Shoreditch.**—Architectural Assistant (temporary) required by the Corporation. T. L. Hustler, Borough Surveyor, Town Hall, Old-st., E.C.1.

JANUARY 13.

***Chelmsford.**—Architectural Assistant required by the Essex C.C. Jno. Stuart, F.R.I.B.A., County Architect, Springfield Old-court, Chelmsford.

JANUARY 30.

London.—Principal required at the Central School of Arts and Crafts, Southampton-row, W.C.1, by the L.C.C. Education Officer (T.1), The County Hall, Westminster-bridge, S.E.1 (stamped addressed foolscap envelope necessary).

MARCH 6.

London.—Assistant Examiners: (Forthcoming Examination) in the Patent Office (20-25, with extension in certain cases). The Secretary, Civil Service Commission, Burlington-gardens, London, W.1.

NO DATE.

***Stepney.**—Builder's Clerk (temporary). Osborn Adamson, Building Works Manager, Limehouse Town Hall, Commercial-road East, E.14.

TENDERS

Received too late for Classification.

CHRISTMAS HOLIDAYS.

Owing to the "Christmas Holidays," all Tenders and other building news intended for our next issue should reach "The Editor" by first post on Monday, December 23.

Brecon.—Gymnasium at the Brecon Boys' County school, for the Breconshire E.C. Mr. H. C. W. Strickland, A.R.I.B.A., County Architect, County Offices, Brecon:—

J. Morgan, Neath	£1,806
A. V. Griffiths, Brecon	1,794
Williams Bros., Pontardawe	1,584
R. Jones, Caerphilly	1,579
S. T. Rees & Co., Ltd., Port Talbot	1,577
Foster & Hill, Abergavenny	1,569
B. Jenkins & Sons, Brecon	1,537
*A. H. Tyler & Son, Brecon	1,523

Brighton.—New school in Hertford-road, for the E.C. Messrs. Thos. Simpson & Son, F.R.I.B.A., architects, 16, Ship-street:—

Limpus & Son, Hove	£12,895
F. T. Wilson & Sons, Brighton	11,285
Bartley & Ward, Ltd., Crawley	11,264
Rice & Sons, Brighton	11,203
J. B. Sharman, Ltd., Ramsgate	11,198
J. Barnes & Son, Brighton	11,159
Negus, Ltd., London	11,041
Field & Cox, Brighton	11,040
R. Cook & Sons, Crawley	10,899
*J. Bodle, Ltd., 4, Grand-parade, Brighton	10,769

Milton.—Public convenience at Barton-on-Sea, for the U.D.C. Mr. Alan W. Pierce, surveyor:—

J. C. Wilkinson & Son, New Milton	£950
A. V. Ridout, Highcliff	875
C. Troke, New Milton	840
*H. H. Drew & Son, New Milton	815

Faulty Development in 1929.

Messrs. Leopold Farmer & Sons write:—"In so far as prices of factories are concerned, these have remained practically the same as in the year 1928, and there is very little diminution in value where a factory is of modern construction. In fact, there appears to be a special demand, which is difficult to meet, for this class of factory. Where no property such as this is available there is a tendency for manufacturers to build to their own requirements, and there are many areas around London within a radius of 30 or 40 miles where considerable building operations are taking place for the erection of factories embracing all the modern requirements of the up-to-date manufacturer. One of the great legislative features of this year, and for which manufacturers are particularly thankful, is the De-Rating Bill. It has given relief to the producer which, in many instances, was much needed. It has assisted him in reducing to a great extent his overhead charges and provided additional working capital for the greater employment of labour and a larger output of the finished product. It has also had the effect of producing a demand for factories in neighbourhoods that have been neglected in consequence of the high rates peculiar to the district."

PROPOSED NEW BUILDINGS AND OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee B.G. for Board of Guardians B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B for County Borough; B. of E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B for Metropolitan Water Board; Borough Surveyor B.S; Borough Engineer, B.E.; District Surveyor D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; County Architect, C.A., Surveyor, S.; Engineer, E.; Borough Architect, B.A.: Architect, A.

Ariesey.—Biggleswade R.D.C. making application to M.H. for £1,100 for purchase land, for 50 new houses. Also seeking sanction to loan £23,680 for 64 cottages, including, in addition to the 50 at Ariesey, 10 at Clifton and 4 at Potton.

Armthorpe.—Funds being raised for extensions, parish church.

Barnsley.—Extensions, factory, Taylor & Sons, Shambles-st. and Peel-st. Plans by P. A. Hinchliffe, F.R.I.B.A., architect, 14, Regent-st.

Belfast.—Tenders to be invited shortly for elementary school, to have accommodation for about 300 scholars, on site at Dunmurry. Plans by S. M'Elveene, 2, Wellington-place.

Bexleyheath.—U.D.C. approved: 58 houses, Exeter and Honiton rds., East Wickham, J. Stevens & Sons; bank premises, 1, Market-place, Bexleyheath, Lloyds Bank, Ltd.; 7 houses, Danson-rd. and The Grove, J. W. Ellingham; 14 houses, Danson-lane, E. H. Langman; 13 houses, Ruskin-av., Welling, McConnell Bros.; development of Long-lane and Bedonwell-rd., Bexleyheath, 58 houses, Cox Bros.

Birmingham.—Governors, Solihull school, propose extensions. Herbert Buckland & William Haywood, FF.R.I.B.A., architects, Norwich Union-chams.

Blackley.—Directors, Blackley Palais de Danse, Limited, erecting verandah on premises in Rochdale-rd. and Oak Bank, Harpurhey.

Blackpool.—C.B. propose houses in Ellesmere-rd.—Council conferring with Victoria Hospital Committee for new hospital site.—B.S. to prepare plans and obtain tenders for four additional rooms Palatine Central school.—B.S. also to prepare sketch plans of school at South Shore.—E.C. considered revised plans technical college and Director of Education been instructed to forward these to B. of E.—Committee been appointed to consider new town hall.—Plans passed: 6 houses and shops, Talbot-rd., Devonshire Estate Syndicate; 6 houses, Burlington-rd., Mrs. Bourne; games office, Watson-rd., Corporation; theatre, Abingdon-st., G. B. Catlow; re-building premises, Ball-st., Jenner & Butterworth.

Blackpool.—Sunday school and parochial hall, by members of St. Peter's Church, South Shore. Rev F. W. Baird Smith.

Bolton.—T.C. approved: J. S. Hughes, 6 houses, Smethurst-lane; A. Coward, 11 houses, Danesbury-rd.; Bleakley & Wesley, 12 houses, Walker-av.; F. E. Thornton, 10 houses, Thornton-av.; R. Entwistle & Co., Ltd., transformer chamber and smithy, Lincoln Mills, Washington-st.; Star Anto-Engineering Co., office and store, Baden-st.; Housing Committee, 6 houses, Furness av.; Crank & Wilson, 6 houses, Red-lane.

Bournemouth.—T.C. received M.H. sanction to erection 43 houses, Luckham-rd. site, Lower Charminster.

Bradford.—Eric Morley, architect, of W. T. Morley & Sons, architects and surveyors, Swan-arcade, preparing plans for school buildings, for Governors, Bradford Girls' Grammar school. Cost, £85,000.

Bromley.—T.C. approved: 6 houses, Foxbury-rd., P. B. Dannatt; addition to Bromley and Chislehurst maternity home, Widmore-rd., P. A. Coad.

Brotherton.—Taddcaster Tower Brewery Co., Lod., York, propose rebuilding "Fox Inn." Plans by Garside & Pennington, F.R.I.B.A., architects, Ropergate, Pontefract.

Burnley.—B.S. prepared plans for 42 additional houses, Stoops estate, 60 additional houses off Rossendale-rd., and 60 houses on site in Pulledge district, for Corporation.

Buttershaw.—Parish of St. Paul's propose extensions at day schools, at £500.

Cambridge.—T.C. approved: 2 pairs of semi-detached houses, Hurst Park-av., Johnson & Bailey, 51, Norfolk-st.; rebuilding of premises, Sidney-st., W. Heffer & Sons, Ltd., 18 and 19, Sidney-st.; 34 houses, Mowbray-rd., Corporation.

Castleford.—U.D.C. propose conveniences at Bradley-st., at £2,136. Tenders to be invited.

Caterham.—U.D.C. approved: 3 pairs houses, Sunnybank, Warlingham, A. Guest; 5 pairs houses, Stafford-rd., Caterham Valley, C. Baines; additions, "Blacksmiths Arms," High-st., Caterham, Crowley's Brewery.

Chichester.—City Council approved 50 non-parlour type, 23 on St. James's-rd. frontage.

* See also our List of Contracts, Competitions, etc.

Coalville.—Leicestershire E.C. propose enlarge Central school at Broomleys. E. G. Fowler, F.R.I.B.A., County Architect, County Education Offices, Greyfriars, Leicester.

Coulsdon and Purley.—U.D.C. approved: E. O'Sullivan, Ltd., 5 detached and 1 pair semi-detached houses, Whyteleafe estate; Midland Bank, Ltd., bank with flat over, Station-parade, Sanderstead-rd., Sanderstead; Old Lodge Estates, Ltd., 23 semi-detached houses, Old Lodge-lane, Purley; Old Lodge Estates, Ltd., 16 semi-detached houses, Old Lodge-lane, Purley; Addington Park Estate, Ltd., 12 semi-detached houses, Addington-rd., Selsdon; Old Lodge Estates, Ltd., 60 semi-detached houses: 52 Haydn-av., 2 Coles Croft-hill, and 6 Tennis-rd., Purley.

Coventry.—E. Howard & Partners, 32, St. James-st., S.W., are to carry out the whole of the reorganisation of existing works of Messrs. Humber & Hillman Motor Car Co., of Coventry.

Croydon.—C.B. resolved that remainder of Mitcham-rd. housing estate be developed with construction of roads and sewers to provide further 364 houses, comprising 380 lettings, and application be made to M.H. for sanction to borrow £33,983 for purpose of its roads and sewers.—M.H. sanctioned £14,000 for erection of Norbury Library.—Plans passed: Batchelor & Son, Ltd., alterations and additions, 39-47, North End; Corporation, extension to maternity hostel, junction of Lodge-rd. and St. James'-rd.; Bethell Swannell & Durnford, 16a, John-st., W.C.2, alterations and additions, London-rd., S.W.16; P. Richardson, 62, High-st., 24 houses, Falkland park-av., and 6 houses, Wharncliffe-gardens; A. J. Mellows, c/o 19, Laurier-rd., 6 garages, Greenside-rd., next 44; Paish, Tyler & Crump, 1, Addiscombe-rd., hotel addition, Shirley-park, Addiscombe-rd.; C. H. Ridge, 8-10, Katharine-st., 27 houses, Hurst View-rd.

Desborough.—U.D.C. received M.H. sanction to borrow £6,650 for 18 houses.

Doncaster.—Managers of St. Peter's R.C. school propose site for erection school buildings.—Doncaster Co-operative Society, Ltd., 1, John-st., proposing stores, Intake Housing estate. Plans by T. H. Johnson & Son, L.R.I.B.A., architects, 20, Priory-place.

Doncaster.—T.C. approved waiting room, cloak-room and tea rooms in Market Hall. F. Oscar Kirby, estates surveyor, prepared scheme. Plans for children's shelter at Hexthorpe Flatts.

Doncaster.—T.C. passed: 6 houses, Sandbeck-rd., Hemsworth Bros.; 4 houses, Wentworth-rd., and 2 houses, Strafford-rd., S. Benson; 5 houses, Adlard-rd., J. E. Brockelbank; branch stores, Sandringham-rd., Doncaster Co-operative Society, Ltd.; public shelter and alterations to conveniences, Waterdale, Corporation; 4 houses, Welbeck-rd., R. Moate & Sons.

Dukinfield.—Halliday & Agate, AA.R.I.B.A., 14, John Dalton-st., Manchester, prepare plans for 120 houses, off Higher King-st. and Cheetham Hill-rd., for Corporation.

Durham.—R.D.C. to acquire Byland Lodge for conversion into Council offices.

Ealing.—T.C. approved: Carbery-av., 8 houses, for A. G. S. Lyford, West Lodge, Acton, W.3; Sudbury Heights-av., 27 houses, A. Graham, 135, Torrington-park, North Finchley; Whitton-av., 10 houses and 10 garages, Thexton & Cowper (Messrs. P. H. Edwards, Ltd., 237, Golders Green-rd., N.W.11); Western-av., Greenford, house, W. Davis (architect, T. Davies, 94, Welldon-crescent, Harrow); Greenford-rd., Greenford, 14 shops with living rooms over, Messrs. Perbill & Co. (architect, J. P. Blake, Bank House, High-st., Hounslow); Carbery-av., house and garage, H. & W. Kendall, 79, Gunnersbury-av., W.5; 203, Northfield-av., alterations, W. J. Sansom (builders: Woodward & Son, Northfield-av., W.13); Greenford-rd., house (Presbytery) (architect, T. H. B. Scott, 11 and 12, Finsbury-sq., E.C.2; Uxbridge-rd., Hanwell, licensed premises, "The King's Arms." Mann, Crossmann & Paulin, Ltd. (architects: F. J. Fisher & Son, 35, John-st., Bedford-row, W.C.1); Albert-rd., 56 garages, Hornsby & Goodman (architects, Hall-Jones & Dewhirst(Ealing); Havenlane, alterations, "The Wheatsheaf." Fuller, Smith & Turner, Ltd. (architect, Nowell Parr, 42, Cranley-gardens, S.W.7); Cambridge-rd., Cambridge-yard, factory and garages, C. Kirby (architect, R. A. C. Churchward, 12, Victoria-st., S.W.1).

Eastbourne.—Tenders to be obtained for convenience at Wish Tower. Major L. Roseveare, B.S.

East Ham.—M.H. received formal sanction of £1,999 for provision of additional lavatory and other accommodation at town hall.

East Ham.—B.C. approved: 6 houses, 122-132, Market-st., A. W. Jaggers; steel-framed factory, corner Church-rd. and Grantham-rd., T. Anders; 3 houses, 140-144, Bristol-rd., R. C. Turner Gordon; 6 houses, 39-49, Folkestone-rd., Herepath Bros.; workshop and store, Fern villas, Napier-rd., E. Farr.

Edmonton.—U.D.C. approved: Garages in College-gardens, H. Conroy; 8 houses, Bridlington-rd., Shepherd & Son; 33 houses, Salmons-rd., Sandell & Co.; store building and extension factory premises, British Oxygen Works, G. W. Newman; 36 houses, Dorchester-av., G. W. Newman; additions Rego Factory, Angel-rd.

Eton.—M.H. held inquiry into application of R.D.C. for £37,217 for sewerage works for Cippenham.

Feltham.—Ecclesiastical Commissioners will give £500 for extension of St. Catherine's Church.

Folkestone. — B.E. to prepare scheme for promenade between The Stake and Baker's Gap.—Plans passed: alterations and additions, 9 and 11, Sandgate-rd., Marks & Spencer, Ltd.; business premises, Sandgate-rd., Bobby & Co., Ltd.

Guildford.—Hodgson, Lunn & Co., L.R.I.B.A., F.R.I.B.A., County Architect, County Education Offices, Greyfriars, Leicester.

Guisseley.—U.D.C. propose convert Oxford House and Oxford Engineering Works, recently acquired, into modern swimming baths, at £10,000.

Halifax.—E.C. propose electricity station near Copley.

Halifax.—Licensing Authorities approved rebuilding "Royal Oak" hotel, at Ward's End. Tenders to be invited.

Haslingden.—T.C. approved plans for 24 houses, off Poplar-st.

Hatfield (Yorks).—Plans been approved by Thorne R.C. for the erection of a Church Mission Hall at Dunscroft, and the building provides for a kitchen, hall, platform, vestry and ante-room.

Haydock.—With approval of Lancashire C.C., work to start on senior Council school for 720 scholars, at £36,545.

Hove.—T.C. approved: G. Warr & Partners, F. Walker, 3 pairs semi-detached houses, Old Shoreham-rd.; G. W. Warr, for E. Davis, 30 houses and 21 garages, Chelston-av. and Portland-rd.

Hoyland.—Church to be erected for members of Church of Sacred Heart and St. Helen (Rev. M. Goaley).

Hull.—Corporation obtained sanction to loan, £1,828, for bridge across Hedon Haven.

Ilford.—Corporation of London decided to spend £6,000 on rearrangement and improvement of City's Crematorium at Ilford Cemetery.

Isleworth.—Fire station and public baths to be built.

Knutsford.—U.D.C. propose to acquire site on Small Heath for motor depot.

Lancaster.—Vicarage for St. Luke's Church, Slyne-with-Hest (Vicar, Rev. A. Warburton).

London (Hackney).—B.C. approved: D. de Groot, lock-up shop, rear 44 and 46, Lower Clapton-rd., abutting on Median-rd.; A. Tate, 4 lock-up shops, railway bank abutting southern side of Ridley-rd.; Burnett & Eprile, factory premises, rear Knightland-rd., southward from Warwick-rd.; D. Hamilton, 5 lock-up garages, rear 53 and 55, Reading-lane.

London (Southwark).—B.C. to spend £85,000 on housing site.

London (Wandsworth).—B.C. approved: W. H. Merrett & Son, gymnasium and covered way, Putney High School, 37, Putney-hill, Putney; C. H. Deane & Son, school, junction Stockport-rd. and Woodmansterne-rd., Streatham; W. H. Wagstaff & Sons, underground conveniences, Gleneagle-rd., Streatham, at junction with Streatham High-rd.; G. Mayhew, 9 lock-up garages on land at rear of premises in Franche Court-rd., Springfield; W. Boone, lavatories, Hurlingham Yacht Club's premises, 43a, Deodar-rd., Putney; F. H. Hooper, 8 houses and garage, Parkthorne-rd., Clapham South; A. G. Jenkins, 9 houses, Gressenhall-rd., Southfield; Swain & Selley, 5 blocks of flats, Beeches-rd., Balham; Wholesale Wine Distributors, Ltd., for alterations and additions, 67-87, Aslett-st., Southfield; The Sycamore Works Co., alterations and additions, 250, Streatham High-rd., Streatham; Courtney & Fairbairn, Ltd., alterations and additions of 98/100, Balham High-rd.; W. Willett, Ltd., cottage and garages, Daneswood House, Dover Park-drive, Putney; Swain & Selley, offices, 149, Topsham-rd., Balham.

Loversall.—Parish Council urging West Riding C.C. to provide elementary Council school.

Luton.—T.C. approved: A. Carter (Luton), Ltd., 4 houses, Stockingstone-rd.; N. Hill, 8 houses, Carlton-crescent; A. E. Smith, 8 houses, Beverley-rd.

Manchester.—Factory premises at Trafford-pk., for Freedlands, Ltd., of Cheetham Hill. Plans by Halliday & Agate, F. & A.R.I.B.A., architects, John Dalton-st.

Manchester.—Housing scheme, to cost four million pounds, first portion of Wythenshaw estate development, to be proceeded with immediately. Committee decided to give instructions for the lay-out on estate for 10,000 working-class dwellings.

Nelson.—T.C. approved: 6 houses, Barkerhouse-rd., T. Liptrot.

Newark.—Plans been approved by U.D.C. for 12 cottage homes and a nurses' home for Newark St. Leonard's Hospital Trustees, upon their site adjoining existing cottage homes adjacent London-rd. and Balderton-gate. J. Saunders, L.R.I.B.A., architect, 24, Castle-gate.

Newmarket.—R.D.C. propose 26 more houses at Soham.

Prestwich.—Messrs. T. A. Fitton & Son, architects, Corporation-st., Manchester, prepared plans for factory and warehouse premises, for Waterdale Dyeing and Furnishing Co., Ltd.

Rotherham.—T.C. approved: Garvin Bilton, Wickersley-rd., 6 pairs semi-detached houses; Montague Burton, Ltd., High-st. and College-st., shop premises.

Samford.—R.D.C. decided to proceed with six bungalows at Stratford St. Mary.

Scawthorpe.—Bentley Colliery Co. propose 43 houses. Watch House-lane, and R.D.C. propose 150 houses.

Shipley.—Funds being raised by members Congregational Church (Rev. L. J. Mallinson), for church.

Southend-on-Sea.—Middleton Hotel, in High-st., to be reconstructed for Mann & Crossman, Ltd. W. Stewart, F.R.I.B.A., 4 and 5, Aldgate High-st., E.1.

South Shields.—Tenders to be invited shortly for alterations, "Beacon Inn." Vanx & Sons, Ltd. T. A. Page & Son, L. & A.R.I.B.A., architects, 67, King-st.

Southport.—Plans have been approved: F. W. Woolworth & Co., Ltd., building, Chapel-st.; Gaumont British Picture Corporation, Ltd., Palladium Cinema, Lord-st.

Walthamstow.—T.C. propose £3,000 on alterations and additions, Coppermill-rd. school.

Warrington.—Deaf and Dumb Society acquired premises, Wilson Patten-st., for adaptation as Institute.

Wellingborough.—Town hall and public baths will cost £50,000.

TRADE NEWS

A Machinery Contract.

We are informed that Messrs. Ruston & Hornsby, Ltd., the Lincoln oil engine manufacturers, have just received instructions to put in hand nine Ruston marine auxiliary oil engine generating sets, each of 306 kw. According to information available, these generating sets will be installed (three sets per vessel) on board three motor cargo liners to be built for the New Zealand Shipping Co., Ltd. The consulting engineers are Messrs. William Esplen, Son & Swainston, Ltd., Billiter-buildings, 22, Billiter-street, E.C.3.

Trade Opportunity Abroad.

H.M. Trade Commissioner at Melbourne (Mr. H. A. L. Setchell) reports that the State Electricity Commission of Victoria is calling for tenders, by February 17, for the supply of refractory bricks and fireclay for boiler furnaces at the Yallourn Power Station. Firms offering British manufactures (Specification No. 30/7) can obtain further particulars upon application to the Department of Overseas Trade (Reference B.X. 5960), 35, Old Queen-street, S.W.1.

The Buenos Aires Exhibition.

H.R.H. the Prince of Wales has expressed his willingness to become patron of the British Empire Trade Exhibition which will be held in Buenos Aires from February 18 to April 2, 1931. It is intended to make the Exhibition truly representative of the British Empire, and we learn that there has already been very considerable response from British manufacturers. Building and decoration, household machinery, applied art, furniture, etc., will find a large place in the scheme. Details of cost, arrangements, etc., may be obtained from 5, Parliament-buildings, Victoria-street, S.W.1.

Drawn Steel Windows.

We have had our attention drawn to a new type of metal window brought out by the Evos Doorways, Ltd., of 11, Grosvenor-gardens, S.W.1. The inventor is Mr. J. Wilson Evans, and we gather the following points regarding his discovery, the "Variolite" drawn steel window:—Mild steel, rust-resisting sheets are used in a process of drawing, pressing or stamping to standard or fancy designs. For casement windows, the outer frame is so constructed as to leave a marginal flange ¾ in. wide all round, which is housed in a kerf round the entire window, thus making it positively weather-tight. As the metal outer frame is not screwed to the internal wooden frame, distortion or warping cannot take effect.

For the ordinary sash windows, the "Variolite" type has, we learn, advantages over the ordinary type. It provides ready accessibility to the sash-weights and cords from the inside of the room; the metal box-casing is ornamental in design; being an engineering product, a perfect fit of every section is obtained, and stiffness of operating and rattling is absent. The weight of all types of "Variolite" windows is said to be lighter than that of windows made of rolled bars, and there is no welding and consequently no open joints. Fuller details may be obtained from the selling agents upon application.

Cement Workers' Welfare.

A draft order for the welfare of workers in factories and workshops where Portland cement or similar cement is made has been issued by the Home Secretary. The order provides for the provision of: Watertight thigh-boots, goggles, waterproof coats and overalls and head-coverings for workers requiring them; accommodation for discarded clothing; rest facilities for women who work standing; a suitable mess-room for workers; and washing facilities. Objections to the order, which has been prepared after discussion with the National Joint Industrial Council for the industry, must be made within thirty days.

PRICES CURRENT OF MATERIALS.*

Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 5 6
Second Hard Stocks	3 19 6

Per 1,000. Delivered at London Goods Stations.

Flettons, at	£ s. d.		£ s. d.
King's Cross	2 12 3	Best Blue Pressed Staffs	9 5 0
Do., grooved for Plaster ...	2 14 3	Do. Bullnose ...	9 15 0
Do., Bullnose...	3 7 3	Blue Wire Cuts	7 5 0

Best Stourbridge Fire Brick :—

2½ in.	8 11 0	3 in.	10 3 0

GLAZED BRICKS—

Best White Ivory, and Salt Glazed Stretchers ...	21 0 0	D'ble Str'tch'rs	29 10 0
		D'ble Headers...	26 10 0
		One Side and two Ends ...	30 10 0
Headers	20 10 0	Two Sides and one End	31 10 0
Quoins, Bull-nose and 4½ in. Flats	27 10 0	Splays, and Squints	28 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours. Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS

Delivered London

	s. d.		s. d.
2 in. per yd. super.	1 11	3 in per yd. super	2 9
2½ in. „ „	2 4	4 in. „ „	3 6

	s. d.		
Thames Ballast	9 9	per yd.	delivered 2 miles Paddington.
Pit Sand	12 0	„ „	
Thames Sand	12 6	„ „	
Best Washed Sand.....	12 6	„ „	
¾ in. Shingle for Ferro-Concrete	12 0	„ „	
¼ in. „ „	12 6	„ „	
¾ in. Broken Brick.....	11 6	„ „	
Pan Breeze	8 0	„ „	

Per ton delivered in London area in full van loads.

Best Portland Cement. British.
Standard Specification. Test £2 6 0 to £2 8 0 20s. alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above	0 7 6
Vitrocrete „ „	0 7 6
Super Cement (Waterproof)	3 16 0
Roman Cement	8 15 0
Parian Cement.....	5 15 0
Keene's Cement, White	5 15 0
„ „ Pink.....	5 10 0
Plaster, Coarse, Pink	3 0 0
„ „ White	3 12 6
„ Fine	5 12 0
Strapite, Coarse	3 9 0
„ Finish	3 17 0
Grey Stone Lime.....	2 10 9
Chalk Lime	2 10 9
Best Ground Blue Lias Lime	1 17 6
Hair ..... per cwt.	2 2 6
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d., if returned in good condition within three months' carr. pd.
Stourbridge Fireclay in s'cks 37s. 0d. per ton at rly. dp.

STONE.

BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube..... s. d. 2 10

BEER STONE—RANDOM BLOCK—
Free on rail at Seaton Station per ft. cube 2 3
Delivered free on rail Nine Elms, S.R. per ft. cube 3 1½
Selected approximate size one way, 1d. per cubic foot extra; selected approximately three sizes or for special work, 3d. per cubic foot extra.

PORTLAND STONE.—
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube..... 4 4½
Do. do. delivered on road wagons at above stations, per ft. cube 4 5½
White basebed, 3d. per ft. cube extra.

NOTE.—1d. per ft. cube extra for every foot over 20 ft *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.—
F.O.R. Quarries, Wirksworth, Derbyshire, s. d.
Random blocks from 10 ft. and over P. ft. cb. 14 0
Sawn two sides ..... „ 22 6
Sawn three or four sides ..... „ 27 6

YORK STONE, BLUE—*Robin Hood Quality.*
Delivered at any Goods Station, London.
6 in. sawn two sides landings to sizes (under 30 ft. super)..... Per ft. super 5 6
6 in. rubbed two sides, ditto ..... „ 6 0
3 in. sawn two sides slabs (random sizes) „ 2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) ..... „ 1 6½
1½ in. to 2 in. ditto, ditto ..... „ 1 3½

HARD YORK—
Delivered at any Goods Station, London.
Scappied random blocks ..... Per ft. cube 6 3
6 in. sawn two sides landing to sizes (under 40 ft. super) ..... Per ft. super 5 1½
6 in. rubbed two sides, ditto ..... „ 6 1½
4 in. sawn two sides slabs (random sizes) „ 2 1½
3 in. ditto ditto „ 2 10
2 in. self-faced random flags.....Per yd. super 8 8

CAST STONE.

Delivered in London area in full van loads, per ft. cube: Plain, 8s. 6d.; Moulded, 9s. 6d.; Cills, 10s.0d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£30 0	3 × 6	£21 0
4 × 9	26 0	3 × 11	25 0
4 × 8	25 0	2 × 11	26 0
4 × 7	23 0	3 × 9	24 0
3 × 8	22 0	2½ × 9	24 0
3 × 7	22 0	3 × 4½	21 0
2½ × 7	21 0	3 × 4	21 0

PLANED BOARDS.

1 × 11	£30 0	1 × 9	£28 0

PLAIN EDGE FLOORING

Inches.	per sq.	Inches.	per sq.
⅝.....	18/-	1¼.....	30/-
¾.....	21/-	1½.....	34/-
1	24/-		

TONGUED AND GROOVED FLOORING

Inches.	per sq.
1	24/-
1¼.....	30/-
1½.....	34/-

Ins. BATTENS.	s. d.
¾ × 2.....per 100 ft.	2 6

MATCHING (BEST).

Inches.	per sq.
⅝.....	16/6
¾.....	19/-
1	24/-

SAWN LATHS.	s. d.
Per bundle	2 6

1" AND UP THICK.

	£ s. d.	£ s. d.
Dry Austrian Wainscot, per ft. cube	0 16 0	to 0 18 0
Dry American and/or Japanese Figured Oak, ft. cube.....	0 14 0	to 0 15 0
Dry American and/or Japanese Plain Oak, ft. cube	0 10 0	to 0 13 0
Dry sq. edged Honduras Mahogany, ft. cube.....	0 15 0	to 0 18 0
Dry Log cut Honduras Mahogany, ft. cube.....	0 16 0	to 1 1 0
Dry Cuba Mahogany, ft. cube....	1 1 0	to 1 10 0
Dry Teak, ft. cube	0 13 0	to 0 15 0
Dry American Whitewood, ft. cube	0 10 0	to 0 14 0
Best Scotch Glue, per cwt.	4 10 0	to —
Liquid Glue, per cwt.	4 7 0	to 5 10 0

SLATES.

First quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000.

	£ s. d.		£ s. d.
24 by 12	32 18 4	18 by 10	18 12 11
22 by 12	29 17 11	18 by 9	16 9 2
22 by 11	27 14 2	16 by 10	15 12 6
20 by 12	26 5 0	16 by 8	12 3 9
20 by 10	22 10 0		

TILES.

Delivered at London rate stations in full truckloads of not less than 6 tons. Per 1,000. f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district.....	£5 7 6
ditto hand-made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) { Hand-made	0 9 6
{ Machine-made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—

R.S. Joists, cut and fitted	£12 10 0
Plain Compound Girders	14 10 0
„ Stanchions	16 10 0
In Roof Work	19 10 0

MILD STEEL ROUNDS.—To London Station, per ton

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	12 0 0	⅝ in. to ¾ in.	10 15 0
⅞ in.	11 0 0	1 in. to 2½ in.	10 10 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Tubes. Wrought Mild Steel.	Tubes. Genuine Staffs. Iron.	Fittings. ½ in. and under.	Fittings. Over ½ in.	Flanges. ½ in. and under.	Flanges. Over ½ in.
	%	%	%	%	%	%
Gas	65	52½	45	47½	55	57½
Water	61½	48½	40	42½	50	52½
Steam	57½	45	35	37½	45	47½
Galv. gas.....	52½	40	35	37½	45	47½
Galv. water	47½	35	30	32½	40	42½
Galv. steam	42½	30	25	27½	35	37½

*C.I.—HALF-ROUND GUTTERS—London Prices ex Works

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	10d.	7½d.	2½d.
3½ in.	10½d.	8½d.	2½d.
4 in.	10½d.	9½d.	2½d.
4½ in.	11½d.	10½d.	2½d.
5 in.	1/1½	11½d.	3½d.

*O.G. GUTTERS.

3 in.	1/0	10½d.	2½d.
3½ in.	1/0½	10½d.	2½d.
4 in.	1/1½	10½d.	2½d.
4½ in.	1/2½	1/0½	2½d.
5 in.	1/5	1/2½	3½d.

*RAIN-WATER PIPES, &c.

Per yd. in 6 ft.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain.....	1/2½	9½d.	1/2
2½ in. „	1/3	10½d.	1/4½
3 in. „	1/6½	1/1½	1/8½
3½ in.	1/11	1/4½	1/11½
4 in. „	2/2½	1/7½	2/4½

*The above R.W. Goods prices are subject to an advance of 5% from October 29th, 1929.

L.C.C. COATED SOIL PIPES—London Prices ex Works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6 fts. plain	2 5	1 9	2 1
2½ in. „	2 9½	1 10½	2 7
3 in. „	3 0	2 1	3 1
3½ in. „	3 3	2 7	3 7
4 in. „	3 8	2 11	4 1½

L.C.C. COATED DRAIN PIPES—London Prices ex Works

	Bends, stock Branches. Pipe, angles, stock angles.	
	s. d.	s. d.
3 in. per yd. in 9ft. lengths	3 6	4 6
4 in. „ „	4 8	5 5
5 in. „ „	6 3	9 0
6 in. „ „	7 3	11 6

	s. d.		s. d.
	7 9		9 3
	15 0		19 0

Gasken for jointing, 41/- per cwt.

IRON—	Per ton in London. £ s. d.		£ s. d.
Common bars.....	11 0 0	to	12 0 0
Staffordshire Crown Bars—Good merchant quality	11 10 0	to	12 10 0
Staffordshire Marked Bars.....	14 0 0	...	15 0 0
Mild Steel Bars	10 0 0	...	11 0 0
Steel Bars, Ferro-Concrete quality, basis price	10 0 0	...	11 0 0
Hoop iron, basis price	11 10 0	...	12 10 0
„ Galvanised	27 0 0	...	28 0 0
Soft Steel Sheets, Black—Ordinary sizes, to 20 g....	13 0 0	...	14 0 0
„ „ „ 24 g....	14 0 0	...	15 0 0
„ „ „ 26 g....	16 0 0	...	17 0 0
Sheets Flat Best Soft Steel, C.R. and C.A quality—Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	15 0 0	...	16 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.....	16 0 0	...	17 0 0
Ordinary sizes, 6 ft. by to 3 ft. to 26 g....	18 0 0	...	20 0 0
No. 1 quality £4 per ton extra.			
Flat and Galvanised Corrugated Sheets—Ordinary sizes, 6 ft. to 9 ft. to 20 g.	16 10 0	...	17 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	17 0 0	...	18 0 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	20 0 0	...	21 0 0
Sheets Galvanised Flat, Best quality—Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	21 0 0	...	22 0 0
Best Soft Steel Sheets, 22 g. and 24 g.	23 0 0	...	25 0 0
Best Soft Steel Sheets, 26 g.	24 10 0	...	25 10 0
Cut Nails, 3 in. to 6 in.....	18 0 0		
(Under 3 in. usual trade extras.)			

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up	30 5 0
Pipe in coils	30 15 0
Soil pipe	33 15 0
Compo pipe	34 15 0

NOTE.—Country delivery, 20s. per ton extra; lots under 3 cwt. 3s. per cwt. extra, and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt extra. Cut to sizes, 5s. cwt. extra.

Old lead, ex London area, at Mills ..... per ton	20 0 0

COPPER.

	s. d.
Seamless Copper tubes (basis)..... per lb.	1 3
Strong sheet ..... „	1 0
Thin..... „	1 1
Copper nails ..... „	1 11
Copper wire ..... „	2 0

PLUMBERS' BRASS WORK.
Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.
½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
29/- 45/- 76/- 153/- 246/- 510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.
½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
41/6 62/- 92/- 174/- 300/- 588/- per doz.

RIVER PATTERN SCREW DOWN MAIN FERRULES.
½ in. ¾ in. 1 in.
39/6 60/- 116/6 per doz.

CAPS AND SCREWS.
1¼ in. 1½ in. 2 in. 3 in. 3½ in. 4 in.
7/6 10/- 14/- 23/- 30/- 42/- per doz.

DOUBLE NUT BOILER SCREWS.
½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
7/6 11/- 17/- 29/- 36/- 63/- per doz.

BRASS SLEEVES.
1½ in. 2 in. 3 in. 3½ in. 4 in.
10/- 12/- 20/- 24/- 31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F.
½ in. ¾ in. 1 in. 1¼ in. 1½ in.
35/- 56/- 98/- 162/- 228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.
1¼ in. 1½ in. 2 in. 3 in.
8 lbs. P. traps ... 33/- 41/- 56/- 101/- per doz.
8 lbs. S. traps ... 35/- 45/- 66/- 126/- „

TIN.—English Ingots, 2/3 per lb. SOLDER.—Plumber's 1/-, Tinmen's 1/2, Blowpipe 1/3 per lb.

PAINTS, &c.

			s. d.
Raw Linseed Oil, in pipes	per gallon		0 4 2
„ „ „	in barrels ...	„	0 4 4
„ „ „	in drums ...	„	0 4 6
Boiled „ „	in barrels ...	„	0 4 6
„ „ „	in drums ...	„	0 4 9
Turpentine in barrels		„	0 3 10
„ in drums (10 gals)		„	0 4 0
Genuine Ground English White Lead, per ton			54 0 0

(In not less than 5-cwt. casks.)
Extra for 1-cwt. kegs over 5-cwt. casks is 5/0 cwt.

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS (*contd.*)

PAINTS, &c. (*contd.*)

		£	s.	d.
GENUINE WHITE LEAD PAINT. "Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morganawyte," "Polacco," "J" Brand, and other best brands (in 14-lb. tins) not less than 5 cwt. lots ...	per ton delivered	73	10	0
Red Lead, Dry (packages extra)	per ton	40	0	0
Best Linseed Oil Putty	per cwt.	0	15	6
Filicol	"	0	15	6
Size. XD quality	ftn.	0	2	0

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per ft.		Per ft.
15 oz. fourths ...	2½d.	32 oz. fourths	6½d.
15 ,, thirds ...	3½d.	32 ,, thirds	9d
21 ,, fourths ...	3½d.	Obscured Sheet, 15 oz.	3½d.
21 ,, thirds ...	4½d.	21 oz.	4½d.
26 ,, fourths ...	4½d.	Fluted, 15oz. 6'd.,21oz.	9d.
26 ,, thirds ...	6½d.	En'lled,15oz. 4½d.,21oz.	6d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED plate in CRATES OF STOCK SIZES.

	Per ft.
¼ Rolled plate	4½d.
⅜ Rough rolled	5½d.
Rough rolled	5½d.
Figured Rolled, Baltic, Oceanic, Arctic Stippolyte, and small and large Flemish White...	5½d.
Ditto, tinted	8½d.
Rolled Sheet	4½d.
White Rolled Cathedral	4½d.
Tinned do.	6½d.

Cast plate is same price as rough rolled.

VARNISHES, &c.

		Per Gallon. £	s.	d.
Oak Varnish	Outside	0	14	0
Fine ditto	ditto	0	16	0
Fine Copal	ditto	0	18	0
Pale Copal	ditto	1	0	0
Pale Copal Carriage	ditto	1	4	0
Best ditto	ditto	1	12	0
Floor Varnish	Inside	0	18	0
Fine Pale Paper	ditto	0	18	0
Fine Copal Cabinet	ditto	1	2	6
Fine Copal Flatting	ditto	1	0	6
Hard Drying Oak	ditto	0	18	0
Fine Hard Drying Oak	ditto	0	19	0
Fine Copal Varnish	ditto	1	0	0
Pale ditto	ditto	1	12	0
Best ditto	ditto	1	2	6
Best Japan Gold Size		0	12	6
Best Black Japan		0	10	0
Oak and Mahogany Stain (water)		0	12	0
Brunswick Black		0	7	6
Berlin Black		0	14	0
Knotting (patent)		1	5	0
French and Brush Polish		0	17	0
Liquid Dryers in Terebine		0	9	0
Cuirass Black Enamel		0	7	0

NEW BUILDINGS IN SCOTLAND

Arbroath. — HARBOUR. — Arbroath Town Council contemplate carrying out a scheme of improvement of the old shipbuilding yard of the harbour, and they have instructed their Town Clerk to make application to the Board of Agriculture and Fisheries for a grant for that purpose.

Bo'ness.—WIDENING.—Subject to the approval of the Ministry of Transport, Bo'ness Town Council are to proceed with a town improvement scheme, at an estimated cost of £16,000.

Dundee.—BUILDINGS.—Plans and sections of the following proposed new buildings, etc., have been lodged at the Office of the City Engineer: — Arbroath-road — petrol-filling station for Messrs. Johnston Brothers, Messrs. Maclaren, Soutar & Salmond, architects, 15, South Tay-street; Queen-street, Broughty Ferry—garage for Messrs. Angus Garage Co., Ltd., Mr. W. M. Wilson, architect, 61, Meadowside; St. Mary's-place—W.c.s for Messrs. J. & E. Shepherd, Mr. J. Johnston, architect, 32, Bank-street; Trades-lane and Candle-lane—additions for Lamb's Garage, Ltd., Messrs. Allan & Friskin, architects, 26, Castle-street; and Dundee Area—towers for the Central Scotland Electricity Board.

Dundee.—SCHOOL.—A new nursery school is to be built on the Blue Mountains site in Dundee at a cost of about £3,000. The plans of the school were approved at a meeting of representatives of the Public Health Committee and the committee of the nursery school. The school will accommodate between 60 and 80 children.

Edinburgh.—BUILDING.—Warrant for the erection of 84 houses at Peffermill-road was granted to the Corporation at a sitting of the Dean of Guild Court. Interim warrant was also granted to the City for extensions at the City Chambers, and warrant for demolition work at Cowan's-close and East Crosscauseway. Among other petitions granted were the following:—T. Brown—nineteen lock-ups, shed, and bungalow at Baronscourt-road.

BUILDING TRADE WAGES IN SCOTLAND*

The following are the present rate of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers—Masons'‡ Bricklayers'† Plasterers'†
Aberdeen	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Airdrie	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Alexandria	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Arbroath	1/6½	1/6½	1/7½	1/7½	1/6½	1/6½	1/5½	1/2
Ayr	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Bathgate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2 to 1/3
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/–
Bo'ness	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Coatbridge	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Dumbarton	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Dumfries	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/6½	1/2
Dundee	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3 †1/2½
Dunfermline	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7½	‡1/2½ †1/2½
Edinburgh	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3½ †1/2½
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galashiels	1/6½	1/7	1/6½	1/7	1/6½	1/6½	1/7	1/2
Glasgow	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Greenock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	1/2½
Hamilton	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2
Hawick	1/7	1/7	1/7	1/7–1/7½	1/7	1/7	1/7	1/2½
Helensburgh	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	1/2½
Inverness	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/– to 1/2
Kilmarnock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Kirkcaldy	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Kirkwall	1/6	1/5	1/4	1/5	1/5	1/4	1/4	1/–
Lanark	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Leith	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3½ †1/2½
Motherwell	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Perth	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Stirling	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7½	1/2½
Stirlingshire (Eastern District)	1/7½	1/0	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Wishaw	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 1076.

DIARIES, ETC.

Post Office London Directory, 1930.

We have received from Messrs. Kelly's Directories, Ltd., of 186, Strand, W.C.2, the 131st (1930) edition of the Post Office London Directory. The task of revising and correcting this volume of nearly 4,000 pages demands scrupulous care and attention to every detail, and we learn that in producing the new edition these have been forthcoming in generous measure. Simplicity of arrangement and ease of reference is made for by the copious index, which should be of great help to users of a book so large and of such wide scope. The area covered is the County of London; together with part of the Borough of West Ham, and the names and addresses are classified as follows:—(1) By streets; (2) in alphabetical lists of the private residents, and of those engaged in any profession or business; (3) a classified trade section, comprising some 5,000 professions and trades arranged alphabetically, each with a list arranged in alphabetical order of those engaged therein. This section should be of particular use to architects and the general building trade. In addition, particulars are given of the establishments of the various Government Departments, with an alphabetical list of officials; and separate sections will be found for, amongst others, of Chambers of Commerce (throughout the country); law (including alphabetical lists of barristers and solicitors); city, municipal, parochial and clerical; transport, hotel, etc. (for the whole country; this section gives full information in regard to the size of places throughout the British Isles, and the various means of reaching them or sending goods there); banking, etc. A street plan is included (scale 4 inches to the mile), and on the back of this is given a map of London and Suburbs (scale 1 inch to the mile), extending in some directions to 20 miles from Charing Cross. In short, information is contained in this Directory required by every business man at some period or another. It may be obtained, price 55s. (or leather, 70s.), from the publishers.

Charles Letts' Diaries.

It is at this time that our thoughts bravely turn to the making of good resolutions. It is a perennial proof of the frailty of human nature that even architects' and builders' good intents sometimes die a natural death about the end of the first week of January. Luckily, the uses of diaries do not suffer the same fate, their period of effectiveness extending throughout the year. Messrs. Charles Letts & Co. send us a splendid selection of the 1930 editions of their diaries, which are, we are told, used by over two and a half million persons. For the office there is the ever-useful scribbling diary, with a classified list of British merchants, manufacturers, shippers, etc. This may be obtained in a variety of forms at almost nominal prices, and is a necessity for every business man. For office or home use there is the "office desk" diary, containing a host of items of information and a trades and professional classified directory, in addition to adequate diary space. For personal use again, Messrs. Charles Letts offer an immense variety of pocket diaries for everyone, from wireless enthusiasts to housewives. In every case the usual insurance coupon has been doubled in value without any increase in price of the diaries. Such diaries are undoubtedly presents with a use.

A Contractor's Estate.

Mr. John Thomas Parkinson, of 27, Raikes-parade, Blackpool, builder and contractor, a director of Messrs. Sir A. Lindsay Parkinson & Co., Ltd., who died on June 8, 1928, left estate of the gross value of £49,945.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	0
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	38	0
Add if in underpinning in short lengths	" "	7	0
Add if in floors 6 in. thick	" "	3	3
Add if in beams	" "	3	9
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	32	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarter-inch vertical damp course	" "	9	6
Three-quarter-inch on flats in two thicknesses	" "	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

		s.	d.
York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Beer stone and all labour fixed	" "	15	0
Portland stone fixed	" "	20	0

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	0
Do. joists	" "	5	6
Do. roofs, floors and partitions	" "	6	0
* Do. trusses	" "	8	6

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-

		s.	d.
Fl t centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	0	11
Centre for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.

		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.	—	44/6	53/-	60/6
Do. tongued and grooved	"	—	49/-	57/6	65/-
Do. matchings	"	45/-	51/-	—	—
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/-	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.

		1¼"	1½"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1¼"	1½"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bea ers	"	1/4	1/6	1/9
Add if cross-tongued	"	2d.	2d.	2d.

STAIRCASES.

	1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1½ in.	per ft. run	0	9
Mahogany handrail: average, 3 in. × 3 in.	" "	6	0
Add if ramped	" "	12	0
Add if wreathed	" "	24	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	16	3
Plain compound girders	"	19	0
Do. stanchions	"	21	9
In roofwork	"	27	6

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/6	1/9	2/-	2/6
Ogee Do. Do.	"	1/9	2/-	2/6	3/3
Rain-water pipes with ears	"	1/9	2/7	—	—
Extra for shoes and bends	each	4/4	5/11	—	—
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	44	0
Do. Do. in flats	"	43	0
Extra labour and solder in coated cesspools	each	6	9
Welf joint	per ft. run	0	6
Soldered seam	" "	1	3
Copper nailing	" "	0	3

		½"	¾"	1"	1½"	2"	4"
Drawn lead waste	per ft. run	1/2	1/9	2/-	3/4	4/-	—
Do. service	"	1/8	2/2	2/7	3/10	—	—
Do. soil	"	—	—	—	—	—	6/9
Bends in lead pipe	each	—	—	—	—	3/3	8/2
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	—
Red lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	"	—	—	—	14/7	19/6	—
Bib cocks and joints	"	6/4	9/7	15/4	41/-	—	—
Stop cocks and joints	"	15/4	17/2	25/8	64/-	—	—

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	6
Do. Do. Sirapite	" "	2	9
Do. Do. Keen's	" "	4	0
Add saw lathing	" "	1	7
Add metal lathing	" "	2	6
(Not including hangers or runners, etc., for suspended ceilings.)			
Portland cement screed	" "	2	2
Do. plain face	" "	3	3
Mouldings in plaster	per 1 girth	0	1½
One-and-a-half granolithic pavings	per yard sup.	5	6

GLAZIER.

		s.	d.
21-oz. sheet plain	per foot sup.	0	8¼
26-oz. Do.	" "	1	0
Obscured sheet	" "	1	1
¼-in. rolled plate	" "	0	9
¼-in. rough rolled or cast plate	" "	0	10½
¼-in. wired cast plate	" "	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting, 1 coat	" "	0	9
Do. 2 coats	" "	1	2
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	" "	1	2
Preparing for and hanging paper	per piece, 2/- to 4/-		

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted*.
† Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.
¶ Denotes *accepted by H.M. Office of Works and H.M. War Office*.

Accrington.—Pump house at Altham Waterworks, for the Accrington District Gas and Water Board :—
*G. Cunliffe & Sons, Ltd., Accrington... £419

Antrim.—Installation of central heating at the fever hospital, for the Massereene Hospital. Mr. F. D. Brown, consulting engineer, Bank of Ireland-chambers, Queen's-bridge, Belfast :—
*A. Clyde, Smithfield-square, Ballymena, Co. Antrim.

Armthorpe.—New headquarters in Mere-lane, for the Armthorpe W.M. Club, for the Trustees. Messrs. T. H. Johnson & Sons, A.R.I.B.A., architects, Priory-place, Doncaster :—
*Metcalfe Brothers, Doncaster.

Bedford.—Branch premises for the Westminster Bank, Ltd., in Cauldwell-road. Messrs. Searle & Searle, A.R.I.B.A., architects, 34, Paternoster-row, E.C.4 :—
*M. & F. O. Foster & Co., Ltd., York-road, Hitchin.

Birmingham.—Maternity and child welfare centres at Erdington and Acocks Green, for the Corporation. Messrs. Ewen Harper Bro. & Co., 191, Corporation-street :—
*P. Cox, 54, Grove-lane, Handsworth, Birmingham.

Birmingham.—Reconstruction of the premises of Messrs. Winter's, Ltd., in Bristol-street. Messrs. G. Payton & Son, architects 102, Colmore-row, Birmingham :—
*T. H. Rowley & Co., 84, Erdington Hall-road, Birmingham.

Birstall.—14 semi-detached houses at Birstall, near Leicester, for the Barrow-upon-Soar R.C. Messrs. Jones & Parkinson, architects, 8, St. Martin's, Leicester :—
*F. Garner & Son, Leicester £4,556

Blackburn.—194 houses on Whitebirk-road and Hamilton-street sites, for the C.B. Mr. H. M. Webb, Borough and Water Engineer :—
Whitebirk-road—
*Leyland Construction Co., Ltd., Leyland.
Hamilton-street—
*Grimshaw & Thomas, Ltd., Market-street, Stretford, Manchester.

Blackburn.—Extensions to the nurses' home at the Blackburn and East Lancashire Royal Infirmary, Infirmary-road. Messrs. Sames & Green, architects, 14, Richmond-terrace :—
*Wm. Livesey & Sons, Nova Scotia, Blackburn.

Blackpool.—Alterations and additions to premises in Clifton-street, for Messrs. Gomersall's, jewellers. Mr. H. Gomersall, architect :—
*Lycett and Platt, Hulme, Manchester.

Blackpool.—Premises, with frontage to Church-street, for the Midland Bank, Ltd. Messrs. R. Gorst & Son, architects, 7, Birley-street :—
*Atherton Bros. (Blackpool), Ltd., Blackpool.
Plasterers—*Haworth & Oldfield, Blackpool.
Stonework—*Ratcliffe Bros., Booker-street, St. Annes-on-Sea.
Asphalt—*Limmer & Trinidad Lake Asphalte Co., Ltd., London.

Blackpool.—Rebuilding of the "Royal Oak" hotel, Lytham-road and Waterloo-road, for Messrs. Catterall and Swarbrick's Brewery, Ltd. Messrs. R. N. Mather, Son & Wilding, architects, 34, Birley-street :—
*Sir Lindsay Parkinson & Co., Ltd., Blackpool.
Steelwork—*T. Blackburn & Sons, Ltd., Preston.
Terra-cotta—*Shaw's Glazed Brick Co., Darwen.
Slating—*C. Hebert & Sons, Preston.
Reinforcement—*Trussed Concrete Steel Co., Liverpool.

Blackpool.—Motor showrooms, offices and garage, Preston New-road, for Mr. H. V. Burlingham Bank-road, Marton. Mr. Halstead Best, F.R.I.B.A., architect, 20, Clifton-street :—
*Emery Bros., Poulton-le-Fylde.

Bolton.—Improvements to the Church Schools at New Bury, Farnworth, for the Parochial Council of St. James' Church (Vicar, Reverend G. Hansford). Mr. F. Thorpe, F.R.I.B.A., architect, Union Bank-chambers, Oldham :—
*G. & J. Seddon, Ltd., Bolton.
Carpenters and Joiners—*S. J. Hodgkiss, Ltd., Bolton.
Slating—*E. Worthington & Sons, Farnworth.
Plasterers—*Wm. Shaw (Farnworth), Ltd., Farnworth.
Plumber—*Thomas Entwistle, Farnworth.

Bolton.—Public washhouse and baths at Rothwell-street, Bolton, for the Corporation. Mr. W. Russell Brown :—
*Middleton & Co (Blackpool), Ltd., Blackpool.

Bradford.—Offices at Rawson Market, for the Corporation. Mr. W. Williamson, architect :—
*Balmforth & Ellis

Bradford.—Warehouse in Thornton-road, for Corporation :—
Mason—*S. Wray & Co.
Joiner—*J. Lister.
Plumber—*F. Studwell & Son

Bradford.—Second section of the new infirmary buildings at Duckworth-lane, for the Governors. Messrs. W. J. Morley & Sons, architects, Swan-arcade :—
*A. Robinson.

Bridgnorth.—Erecting new building at the waterworks, in connection with the intended new electric pumping apparatus, for the Corporation. Borough Surveyor :—
*A. Edge & Son, Wellington-road, Bilston £346

Bristol.—Tea pavilion and dance hall, for the Clifton Zoological Gardens Committee Mr. W. H. Watkins, F.R.I.B.A., architect, 15, Clare-street :—
F. Wilkins, 24, Temple Back, Bristol (about) £18,000

Calverley.—Alterations to the boiler house at the Council Offices, for the U.D.C :—
*Jeffrey & Hutchison.

Cheadle and Gatley.—Conversion of privies to water carriage system at several properties, for the U.D.C. Mr. T. Hayes, Sanitary Inspector, 19, High-street. Quantities by the Sanitary Inspector :—
*H. Chester, 2, Stockport-road, Cheadle.

Cheltenham.—Business premises, 24, Gloucester-road, Cheltenham, for the Gloucester Co-operative and Industrial Society, Ltd. Thomas Malvern L.R.I.B.A., architect, 21, Winchcombe-street :—
*W. J. B. Halls, Ltd., Barton Gates, Gloucester.

Chesterfield.—Alterations to premises, Knifesmithgate and Packers-row, for Messrs. Swallow & Sons. Messrs. Harris & Sheldon, Ltd., architects, 38, Thomas-street, Manchester :—
*Harris & Sheldon, Ltd., Manchester.

Clutton.—Installation of electric light at the Institution, for the B.G. Mr. J. Wayne Morgan, engineer, 9, Mount Stuart-square, Cardiff :—
*Winter & Co., Bristol.

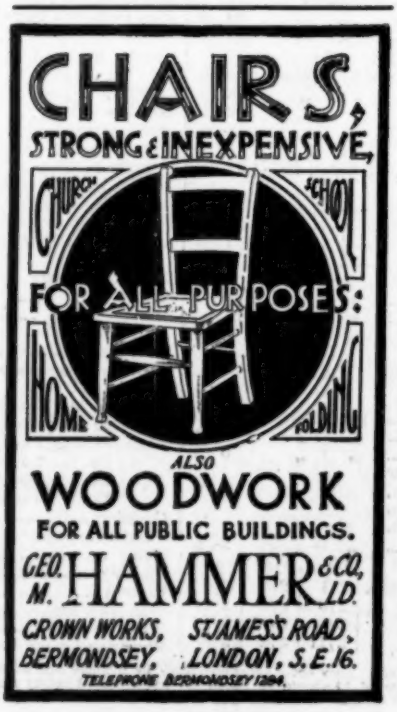
Coulsdon and Purley.—Iron fencing and gates for Copse Hill Spinney, for the U.D.C. :—
*T. W. Palmer & Co., Merton £166

Dewsbury.—Reconstruction of "The Bridge Inn," at Fall-lane, for Messrs. J. Smiths Tadcaster Breweries, Ltd. Mr. B. Wilson, architect, High-street, Tadcaster :—
Brickwork and Joiners' work—*J. Binks & Sons.
Asphalters—*Tunstalls Rock Asphalte Co., Ltd.

Eastbourne.—Additions to "Esperance" Nursing Home. Mr. J. S. Gilbert, architect :—
J. Bodle, Ltd., Eastbourne £11,357

Eastbourne.—Redecking portion of Eastbourne Pier, for the Eastbourne Pier Co. Mr. M. Noel Ridley, engineer :—
J. Bodle, Ltd., Eastbourne £1,300

Eastbourne.—Further extensions to the Star Brewery. Mr. A. Ford, F.R.I.B.A., architect :—
J. Bodle, Ltd., Eastbourne £3,500



Eastbourne.—Alterations and extensions to the Turkish baths, for the Corporation :—
J. Bodle, Ltd., Eastbourne £9,272

Edmonton.—Alterations and additions to 180, Fore-street, for Messrs. M. Schleicher & Sons. Mr. Brien L. Sutcliffe, A.R.I.B.A., architect, 7, Duke-street, Wigmore-street, W.1 :—

W. M. Brand	£628 0
Robertson & Cameron	598 17
G. N. Watts, Ltd.	598 10
*I. J. Galinski	586 0

Forest Row (Sussex).—House, for Captain Bellairs. Messrs. J. Douglass Mathews, Son & Ridley, F.R.I.B.A., architects :—
*J. Bodle, Ltd., East Grinstead £2,525

Goole.—75 houses of the new estate, for the U.D.C. :—
*—, Bainbridge, Doncaster £25,618

Goole.—Conversion of pail closets into water closets, for the U.D.C. Mr. J. H. Castle, Town Surveyor :—
Contract No. 9—
*E. W. Simpson, 31, Westfield-avenue, Goole £148 19
Contract No. 10—
*J. E. Webster, Mariners-street, Goole 102 18
Contract No. 11—
*E. W. Simpson, 31, Westfield-avenue, Goole 90 1

Halton.—Congregational Church and Sunday school at Halton for the Leeds Congregational Council. Messrs. Chorley Gribbon & Foggitt, architects, 3, Park-place, Leeds :—
*Wood Bros. (Leeds), Ltd.
Plumber—*J. Lindley.
Roof Tilers—*J. Atkinson & Son, Ltd.
Plasterers—*Cowling & Hobson.
Painter—*L. Greenwood.
(All of Leeds.)

Horley.—New transport depot for Messrs. Hall & Co., Ltd., Croydon. Messrs. Wallis Gilbert & Partners, F.R.I.B.A., architects :—
J. Bodle, Ltd., East Grinstead £26,854

Hornsea.—254 yards super of prime maple flooring, at the Floral Hall, for the U.D.C. :—

Marsdens, Ltd., Hull	£145 0 0
Hollis Bros., Ltd., Hull	137 11 8
Hewetson's, Ltd., Hull	123 16 6
*H. Beall & Sons, Cliff-road, Hornsea	119 0 0

Hove.—Painting the external woodwork and ironwork of the Hove Baths, King's Esplanade, for the T.C. Mr. T. R. Humble, Borough Surveyor :—
*J. Parsons & Sons, Ltd., 176, Church-road, Hove £133

Hove.—House in Palmeira-avenue, for Mrs. McLean. Messrs. Baillie, Scott & Beresford, architects, 8, Grays Inn-square, W.C.1 :—
*J. Bodle, Ltd., Brighton.

Hove.—New shop front for Mr. H. Parks. Messrs Callow & Callow, F.R.I.B.A., architects :—
J. Bodle, Ltd., Brighton £710

Huddersfield.—Raising the main chimney at the Crossland Moor Institution, for the B.G. Messrs. J. Berry & Sons, architects, 1, Market-walk :—
*J. Tinker & Sons, Market-place, Huddersfield.

Jedburgh.—Concrete tank near Castle, and for cutting tracks and laying jointing about 3¼ miles of 6-in. cast-iron pipes, for the T.C. Messrs. J. & A. Leslie & Reid, C.E., 72a, George-street, Edinburgh :—
*Hugh Lapraik & Sons, Treeshill, Ayr £7,567 5 3

Leicester.—Extension to the Leicester Railwaymen's Club in East Park-road. Mr. H. Barnes, architect. Quantities by Messrs. Robey B. Carpenter & Son, quantity and measuring surveyors and arbitrators, Palace-chambers, Leicester :—

Geo. Duxbury & Sons	£1,559 0 0
S. A. Potter	1,555 15 9
Roberts & Borham	1,550 0 0
Coltman Bros.	1,547 0 0
T. W. Bilson	1,544 0 0
*H. Frearson & Sons	1,496 6 9

¶London.—The following contracts have been entered into by H.M.O.W. Department during the week ended the 7th instant :—
Douglas district—ordinary works and repairs—J. K. Brearley, Auckland-grove, Douglas, Isle of Man.
Carlisle employment exchange—erection of—J. & R. Bell, Ltd., Nelson-street, Carlisle.
Darlington employment exchange and inland revenue office—erection of—Gustavus Bailey, Ltd., 16, King-street, South Shields.
Colchester district—ordinary works and repairs—F. Hutton & Son, Birch, nr. Colchester.
Crawley post office and telephone exchange—alterations and additions—Negus, Ltd., 1, Laurence Pountney-hill, E.C.4.
Chelsea Royal Hospital—infirmary block—rewiring for light and power—T. Clarke & Co., Ltd., 129, Sloane-street, S.W.1.
Frinton-on-Sea post office—alterations and additions—Field & Son, 176, Old-road, Clacton-on-Sea.
Edinburgh district—plumbers' work—P. Knox & Son, 31, Crichton-place, Edinburgh.

Post Office Savings Bank, Blythe-road, West Kensington—formation of soundproof alcoves—J. Garrett & Son, Ltd., 83, Balham-hill, S.W.12.
Barking employment exchange—erection of huts—Wm. Harbrow (1928), Ltd., 214, Rotherhithe New-road, S.E.16.
Kensington-gardens — erection of a children's shelter—Leslie & Co., Ltd., Kensington-square, W.8.
Rhos-on-Sea—erection of a telephone exchange—W Griffiths, Sons & Cromwell, Ltd., 22, Upper Duke-street, Liverpool.
Motherwell post office and telephone exchange—alterations and extensions—Murdoch MacKenzie, Ltd., Wilson-street, Motherwell.
Shipley employment exchange—erection of—F Turner, Ltd., Bradford-street, Keighley.
Chesterfield employment exchange—erection of—C. H. Hill, Victoria-street, Mansfield.
Stockton-on-Tees district—ordinary works and repairs—J. S. Earnshaw, Ltd., Castlegate, Stockton-on-Tees.

London.—The following works contracts have been placed by the War Office during the week ended December 12, 1929, by H.M. War Office :—
North Aldershot, Blenheim and Ramillies barracks, improvements and alterations to regimental institutes—J. R. McLean Keil, Camberley.
Belfast, Holywood barracks—erection of cookhouse—J. Miskimmin & Sons, Ltd., Belfast.

London.—Extensions to the Upper Latymer school, Hammersmith, by erection of a new library art room and geography room, together with new front screen wall. Mr. J. M. Kellett, F.I.A.A., architect. Mr. W. Woodbridge Biggs, chartered surveyor, 23, Ely-place, E.C.1 :—

	New buildings.	*Wall.*
Andrew & Gash, Ltd.	£4,523	£1,573
W. H. Wagstaff & Sons	4,315	1,442
Geo. Parker & Sons, Ltd.	4,279	1,483
W. J. Marston & Son	4,159	1,538
J. E. Billings & Co, Ltd.	4,157	1,442
W. H. Cooper & Son	4,144	1,449
Willian Lowe, 190, Castelnau, Barnes, S.W.13	‡4,154	1.418
G. Hawkins, 203, Goldhawk-road, Shepherd's Bush, W.12	—	‡1,456

London.—Elementary school at Downham, Lewisham, to accommodate 512 scholars, for the Rev. Father J. W. Simmons. Quantity surveyors, Mr. F. Stanley Griffith, in conjunction with Mr. W. Forbes Campbell, 36, Victoria-street, S.W.1 :—

H. Hann	£17,137
R. Scholley & Son	16,377
Snelling & Rayment	16,095
Higgs & Hills, Ltd.	15,940
M. J. Gleeson, Ltd.	15,550
Coxhead & Co.	15,503
Robertson & Cameron	15,499
John Garrett & Son, Ltd.	15,150
Chas. S. Foster & Sons	15,089
‡E. H. Burgess	14,866
J. Hocking (withdrawn)	14,054

London.—Alterations and extensions to University College Hall, Queen's-walk, Ealing, for the Governors. Mr. Brian L. Sutcliffe, A.R.I.B.A., architect, 7, Duke-street, Wigmore-street, W.1 :—

Pell & Clayton, Ltd.	£11,150
M. & F. O. Foster	11,100
F. & H. F. Higgs	10,550
Y. J. Lovell & Co.	10,538
Harry Neal, Ltd.	10,405
James Carmichael, Ltd.	10,387
W. J. Dickens	10,270
*Frank Parvin, Ltd.	9,986

London.—Alterations and additions to factory at 97/99, Hackney-road, for Messrs. James Webb & Sons, Ltd. Mr. Brian L. Sutcliffe, A.R.I.B.A., architect, 7, Duke-street, Wigmore-street, W.1 :—

W. Haydon	£1,263
Wire & Forrest	1,244
*T. Gates & Son	1,195

London.—Alterations and extensions to 60-62, High-road, Kilburn, N.W.6, for Messrs. Shirley Brothers. Mr. Brian L. Sutcliffe, A.R.I.B.A., architect, 7, Duke-street, Wigmore-street, W.1 :—

Robertson & Cameron	£473
F. Troy & Co.	431
Fred Mark	429
—. Gilbert	394
*G. N. Watts, Ltd.	389

London.—Conversion into self-contained flats of Nos. 26/27, Devonshire-street, W.C.1, for Mr. A. F. Brown. Mr. Brian L. Sutcliffe, A.R.I.B.A., architect, 7, Duke-street, Wigmore-street, W.1 :—

A. J. & C. Hocking	£3,951
G. N. Watts, Ltd.	3,928
C. P. Roberts, Ltd.	3,669
F. G. Minter, Ltd.	3,658
Eastlakes, Ltd.	3,530
*Robertson & Cameron	3,387

London.—External painting at Corporation Buildings, for the City Corporation :

Rice & Son, Ltd.	£2,239
W. G. Larke & Sons	2,012
N. Lidstone & Son (R. N. Lidstone)	1,649
Walter Lawrence & Son, Ltd.	1,630
L. & W. Whitehead, Ltd.	1,555
*Killby & Gayford, Ltd.	1,427

Macclesfield. — Conversion of premises into Masonic Rooms and Assembly Hall. Mr. Percy Wright, architect, King Edward-street :—
*G. Roylance & Co., Ltd., Macclesfield.

Manchester. — Bakehouse at 263, Kingsway Burnage, for Mr T. Cheesman, Lawson-street, Maryport. Mr. Harold Hankinson, architect, 2, Ashley-road, Altrincham :—
*J. Armstrong & Co., Yew-street, Manchester.

Manchester.—Shop and house, Nuthurst-road, Moston, for Mrs. E. Keigh. Messrs. Leach & Unsworth, Ltd., architects, Monsall-road, Newton Heath :—
*Leach & Unsworth, Manchester.

Manchester.—Printing works in Waterloo-road, Cheetham, for Mr. A. Sockolov, Parker-street, Strangeways. Messrs. Drury & Gomersall, architects, 15, Oxford-street, Manchester :—
*Mosley Construction Co., Ltd., Manchester.

Manchester.—Conversion of house into shop and house and lock-up shop, Meadlow-street and Raby-street, Moss Side, for Mr. Roberts. Mr. F. Riley, A.R.I.B.A., architect, of Messrs. Brameld & Smith, 4, Cannon-street :—
*T. Bowman, Pendleton.

New Windsor.—26 houses in Dedworth-road, for the T.C. Mr. E. A. Stickland, Borough Engineer, 16, Alma-road :—

H. Parker, London	£10,660
—. Ricketts, Slough	10,367
H. Street, Slough	9,260
Naylor & Robinson, Morecambe	8,740
Cain & Co., Hounslow	8,598

Newmarket.—Houses, for the R.D.C. :—

Three pairs at Cheveley—		
*W. F. Fuller	£2,781	6
Pair at Bottisham—		
*S. S. Ambrose & Son, Ely	820	0
Two pairs at Lode—		
*S. S. Ambrose & Son	1,640	0
Two pairs at Swaffham Prior—		
*S. S. Ambrose & Son	1,580	0
Pair at Wooddition—		
*Ambrose & Son	840	0

Norwich.—Factory premises for Messrs. Bullard & Sons. Messrs. Buckingham & Berry, architects, Church-street, Sheringham :—
*G. R. Carter, Drayton, Norwich.

Nottingham.—Store in Aspley-lane, for the Co-operative Society, Ltd., Upper Parliament-street. Messrs. Betts & Son, architects, 630, Radford-road, Nottingham :—
*J. G. Short & Sons, Nottingham.

Nottingham.—Washhouses in Noel-street, Muskham-street and Willoughby-street, for the T.C. Mr. T. Wallis Gordon, City Engineer and Surveyor :—
Noel-street—*T. Long & Sons.
Muskham-street—*Quarton & Williamson
Willoughby-street—*T. Fish & Sons.
(All of Nottingham.)

Oldham.—Male and female conveniences at the junction of Drury-lane and Manchester-road, Hollinwood, for the Corporation. Borough Engineer :—
*Whitworth Whittaker, Ltd., Oldham... £1,200

Plymouth.—Redecoration of the natural history and geological rooms, etc., at the Museum and Art Gallery, Tavistock-road, for the Corporation. Mr. J. Wibberley, City Engineer and Architect, Sun-buildings :—
*Langworthy & Son, 50, Mutley-plain, Plymouth.

Plymouth.—58 non-parlour houses, and construction of common drains, etc., at Grassendale-avenue, North Prospect, for the C.B. Mr. J. Wibberley, City Engineer and Architect, Sun-buildings
*A. Snape & Son, Rhyl.

Plymouth.—Extensions and alterations to premises in Union-street. Messrs. S. W. Haughton & Son, architects, 35, Bedford-street :—
*Wakeham Bros., Ltd., Friary Building-yard, Knighton-road, Plymouth.

Preston.—Sunday school in Eldon-street, for the Trustees of St. David's Protestant Church. Mr. F. Parkinson, architect, Richmond-terrace, Blackburn :—
*W. Jackson & Sons, Ashton, Preston.

Ramsgate.—Tea pavilion at Jacky Baker's recreation ground, for the T.C. Mr. W. Everard Healey, architect :—
*Tree & Castle £1,090

Sileby.—Branch premises at Sileby, for the Westminster Bank, Ltd. Messrs. Jones & Parkinson, architects, 8, St. Martin's, Leicester :—
*A. Walker, Sileby, near Loughborough.

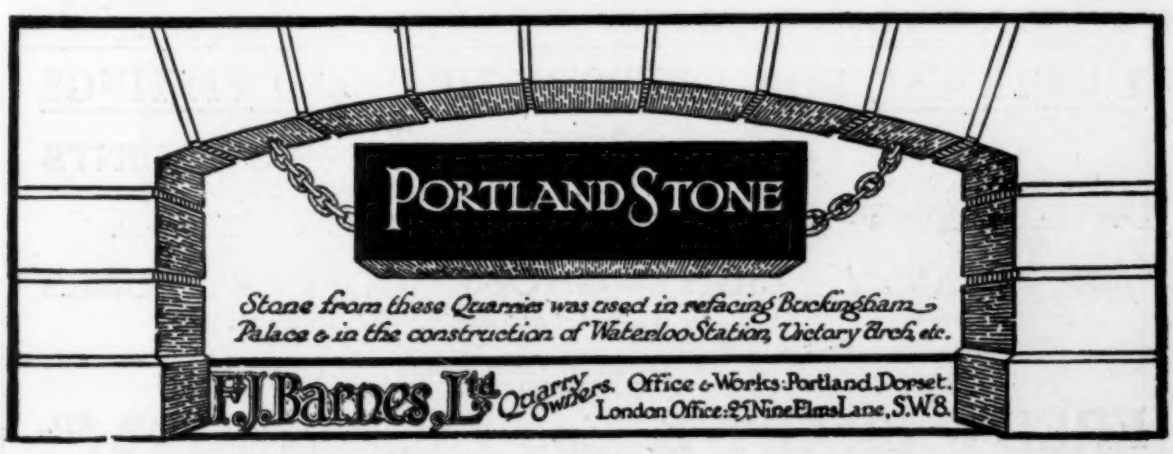
Stockport.—Conversion of existing buildings into laboratory and calorimeter room at the Portwood Gas Works, for the C.B. Mr. W. S. Sowerbutts, engineer and manager, Gas Works :—
*F. Broadhurst & Son, Stockport.

Torpoint—Adaptation of H.M. Gunwharf, Devonport, for the Cornwall C.C. Mr. S. Pool, A.R.I.B.A., County Architect, County Hall, Truro :—
*R. H. Runnalls & Son, Liskeard..... £7,320

Tynemouth.—Shop, pavilion and cafe at the Tynemouth Park extension, for the T.C. :—
*Temple & Pyle, Whitley Bay £1,421

Watford.—Alterations to children's home, for the B.G. Mr. Sydney Dawe, A.R.I.B.A., architect :—

Payne Bros.	£2,947
Brightman & Sons	2,945
W. Judge & Sons	2,912
Clifford & Gough	2,909
W. King & Sons	2,856
A. Carter, Ltd.	2,840
Clark Bros.	2.840
Tracey & Clark	2.811
E. & S. Rose	2,775
—. Waterman	2,773
Wm. Shurmur & Sons, Ltd.	2,736
*J. Darvell & Sons	2,700
J. Dennett	2,660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Warrington.—Internal painting of various buildings at Aikin-street Hospital, and the internal painting required at public baths, for the T.C. Mr. Andrew M. Ker, Borough Engineer and Surveyor:—

*S. & F. Acton, Arpley-road, Bridge Foot, Warrington.

Whitefield.—Public conveniences in Whitefield park, for the U.D.C.:—

*F. M. & H. Nuttall, Ltd., Whitefield.

Whitwood.—For shelter at the cemetery, for the U.D.C.:—

*R. Walker & Sons £117 6

Widnes.—Open-air school off Peelhouse-lane, for the E.C. Borough Engineer and Surveyor:—

P. A. Baines & Son, Preston	£6,350
J. Dolan & Son, Warrington	5,900
J. Jones & Sons (Wootton), Ltd., Wootton	5,750
J. Penny, Widnes	5,694
W. Penney, Widnes	5,685
D. A. Ablett & Sons, Ltd., Wigan	5,550
Tyson (Contractors), Ltd. Liverpool	5,480
Wm Griffiths, Sons & Cromwell, Ltd., Liverpool	5,375
J. Partington, Ltd., Manchester	5,300
W. Peak, Warrington	5,150
W. Townson & Sons, Ltd., Bolton	5,127
W. Spencer, Ltd., Liverpool	5,088
A. Swinton, Warrington	5,025
W. E. Hughes, Ltd., Birkenhead	4,975
H. Fairclough, Warrington	4,889
T. & C. Rigby, Warrington	4,889
F. Smith, Widnes	4,875
James Ashcroft & Sons, Golborne	4,825
Clough & Gaskell, Wigan	4,550
J. E. Farrel, Appleton, Widnes	4,487

Widnes.—Open-air school off Pellhouse-lane, for E.C. Mr. W. S. Wilson, Borough Engineer and Surveyor:—

*J. E. Farrell, Appleton Widnew.

Woodville.—Garage and petrol station on Burton-road, for Messrs. J. Poynton, & Sons. Mr. C. Soar, architect, Burton-road, Lower Midway, Burton-on-Trent:—

*H. Grange, Burton-on-Trent.

Worcester.—Electrical installation at 66 houses on the Bromyard-road housing site, for T.C.:—

*P. J. Addyman £588

Workington.—Central school and hall at Banklands-gardens, for Very Rev. J. C. Standish, O.S.B., The Priory. Messrs. Foden, Hemm & Williams, architects, 199, Deansgate, Manchester:—

*J. Gilmore & Son, Workington.
Mason—*Walker Bros., Cockermouth.
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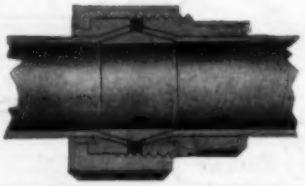

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